URS

March 31, 2003

Mr. Barney Chan
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Re: First Quarter 2003 Status Report
ARCO Service Station # 2035
1001 San Pablo Avenue
Albany, California
URS Project #38486169

Dear Mr. Chan:

On behalf of Atlantic Richfield Company (ARCO-an affiliated company of the Group Environmental Management Company), URS Corporation (URS) is submitting the *First Quarter 2003 Status Report* for the ARCO Service Station #2035, located at 1001 San Pablo Avenue, Albany, California.

If you have any questions regarding this submission, please call at (510) 874-3280.

Sincerely,

URS CORPORATION

Scott Robinson
Project Manager

Enclosure: First Quarter 2003 Status Report

cc: Mr. Paul Supple, ARCO, PO Box 6549 Moraga, CA 94570
Muriel & Emile Turpin, Trustees, 957 Arlington Avenue, Berkeley, CA 94707
Mr. Robert Cave, BAAQMD-Permit Division, 939 Ellis Street, San Francisco, CA 94109
Barbara & James A. Lestrange, Property Owners, 6 La Canada Court, St. Helena, CA 94575

URS Corporation
500 12th Street, Suite 200
Oakland, CA 94607-4014
Tel: 510.893.3600
Fax: 510.874.3268

Date: March 31, 2003
Quarter: 1Q 03

ATLANTIC RICHFIELD COMPANY QUARTERLY STATUS REPORT

Facility No.: 2035 Address: 1001 San Pablo Avenue, Albany, California
Atlantic Richfield Co. Environmental Engineer: Paul Supple
Consulting Co./Contact Person: URS Corporation / Scott Robinson / (510) 874-3280
Consultant Project No.: 38486169
Primary Agency: Alameda County Health Care Services Agency

WORK PERFORMED THIS QUARTER (First – 2003):

1. No environmental work was conducted at the site during the first quarter 2003.
2. Prepared and submitted 2002 semi-annual groundwater monitoring report.
3. Prepared first quarter 2003 status report.
4. Installed blower for soil vapor extraction (SVE) system, but a filter for the blower is needed before the system can be operated.

WORK PROPOSED FOR NEXT QUARTER (Second – 2003):

1. Perform 2003 semi-annual groundwater monitoring event.
2. Prepare 2003 semi-annual groundwater monitoring report.
3. Operate soil vapor extraction (SVE) and air sparge (AS) remediation systems.

CAMBRIA

June 15, 2001

Mr. Barney Chan
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: **ARCO Service Station # 2035**
1001 San Pablo Avenue
Albany, California
Cambria Project #436-1610
StID #3858

JUN 22 2001

Dear Mr. Chan:

On behalf of BP/ARCO, Cambria Environmental Technology, Inc. (Cambria) has prepared this response to your letter dated May 29, 2001. This letter addresses the following issues: MTBE confirmation, sampling and remediation of Shell well S-5, and a list of active remediation wells.

The site is currently on a semi-annual sampling schedule (2nd and 4th quarters). The highest MTBE concentrations in groundwater were confirmed by EPA Method 8260, as part of the second quarter 2001 sampling event performed on May 4, 2001. The results of these analyses will be included in Cambria's Second Quarter 2001 Groundwater Monitoring Report.

Shell Well S-5 was sampled on May 31, 2001 by Shell's contractor and the results will also be included in Cambria's Second Quarter 2001 Groundwater Monitoring Report. Cambria is in the process of evaluating the logistics of including well S-5 into the onsite operating soil vapor extraction and air sparging (SVE/AS) system.

Currently, air sparging is being performed on wells AS-1 and AS-2 and in-well air sparging is being performed on well RW-1. Soil vapor extraction is being performed on wells VW-1 through VW-6, VW-8 and VW-9.

Please call me at (510) 450-1985 if you have any questions or comments.

Sincerely,
Cambria Environmental Technology, Inc.

Ron Scheele RG
Senior Project Manager

Attachments: Figure 1 Site Plan

cc: Mr. Paul Supple, BP/ARCO, P.O. Box 6549 Moraga, California 94570
Ms. Karen Petryna, Equiva Services, P.O. Box 7869, Burbank CA 91510-7869

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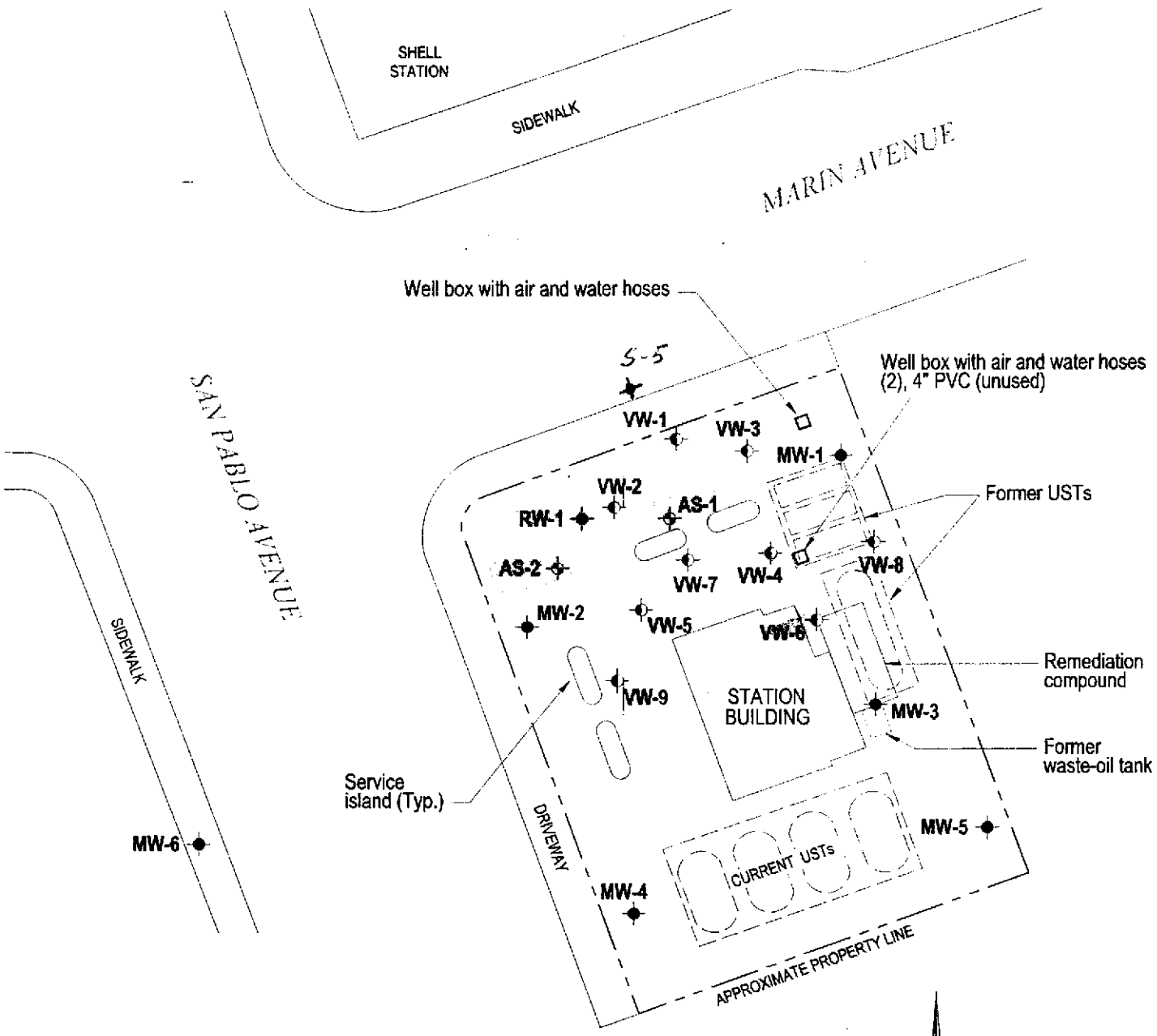
Oakland, CA
San Ramon, CA
Sonoma, CA

Cambria Environmental Technology, Inc.

1144 65th Street
Suite B
Oakland, CA 94608
Tel (510) 420-0700
Fax (510) 420-9170



EXPLANATION

- MW-1 — Monitoring well location
- VW-1 — Vapor extraction well location
- AS-1 — Air sparge well location

FIGURE **1**

H:\ARCO\2035\FIGURES\SITEPLAN.DWG

ARCO Service Station 2035

1001 San Pablo Avenue

Albany, California

CAMBRIA

Site Plan

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

May 29, 2001
StID #3858

Mr. Paul Supple
ARCO
P.O. Box 6549
Moraga, CA 94570

Re: ARCO Service Station No. 2035, 1001 San Pablo Ave., Albany, CA 94502

Dear Mr. Supple:

Our office has received and reviewed the **May 11, 2001 Site Status and Remediation System Performance Report First Quarter 2001** prepared by Cambria Environmental. It appears that this report has not addressed the items mentioned in my October 26, 2000 letter to you, copy enclosed. Please note that in this letter, ARCO was requested to confirm any MTBE detected using EPA Method 8260 and take over sampling and remediation in the Shell well, MW-5, on the south side of Marin Ave. In addition, your consultant was to clarify which wells are being used in the SVE/Air Sparge remediation system. The contamination in MW-5 should be included in your remediation plans.

Please provide a written response to these items to insure that your next quarter's activities reflect these understandings.

You may contact me (510) 567-6765 if you have any questions.

Sincerely,

Barney M Chan

Barney M. Chan
Hazardous Materials Specialist

Enclosure (Mr. Supple)

C: B. Chan, files
Mr. R. Scheele, Cambria Environmental, 6262 Hollis St., Emeryville, CA 94608
Mr. J. Lestrange, 2421 Dena Way, Calistoga, CA 94515
Ms. K. Petryna, Equiva Services, P.O. Box 7869, Burbank, CA 91510-7869

2-1001SanPablo

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

October 26, 2000
StID # 3858

Mr. Paul Supple
ARCO
P.O. Box 6549
Moraga, CA 94570

Re: ARCO Service Station No. 2035, 1001 San Pablo Ave., Albany, CA 94502

Dear Mr. Supple:

This letter recounts a recent (9/00) conversation I had with Mr. Darryk Ataide of Cambria, your consultant for the above referenced site. We discussed questions that arose after my review of the **August 4, 2000 Second Quarter 2000 Monitoring and Remediation System Performance Report.** I bring these items to your attention to confirm that ARCO concurs with his comments to my questions. The following items were discussed:

- It was agree that MTBE would be confirmed by EPA Method 8260 on the highest MTBE impacted well reported by EPA Method 8020.
- The Shell well designated MW-5 on the south side of Marin Ave. was determined to be impacted by the ARCO site via Shell's 3/9/00 conduit study. Thus ARCO would take over the sampling and remediation of this well, which has had historically free product.
- Mr. Ataide was going to clarify which wells are included in the SVE & Air Sparge system. Are more wells other than RW-1 being used? If not, how will contamination in MW-5 be dealt with?

Please clarify these items. You may contact me at (510) 567-6765.

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

C: B. Chan, files
Mr. D. Ataide, Cambria, 1144 65th St., Suite B, Oakland CA 94608
Mr. J. Lestrange, 2421 Dena Way, Calistoga, CA 94515
Ms. K. Petryna, Equiva Services, P.O. Box 7869, Burbank, CA 91510-7869

1001 San Pablo clar

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
(510) 337-9335 (FAX)

September 3, 1999
StID # 3858

Mr. Paul Supple
ARCO Products Co.
P.O. Box 6549
Moraga, CA 94570

Re: ARCO Station No. 2035, 1001 San Pablo Ave., Albany, CA 94706

Dear Mr. Supple:

Our office has received and reviewed the August 24, 1999 Second Quarter 1999 groundwater monitoring report for the above site prepared by the IT Group. In this report, your consultant, Pinnacle, a member of the IT Group, recommends changing the monitoring schedule at this site from quarterly to semi-annually. Based on the decrease of petroleum being removed by the soil-vapor extraction system and the apparent equilibrium conditions of dissolved contaminants, our office approves of this monitoring change. Therefore, monitoring shall occur in the second and fourth quarters of the year.

Our office, however, has the following observations and recommendations:

- Due to the presence of MTBE in the off-site well, MW-6, please confirm any MTBE in MW-6 using a GC/MS method, EPA 8240 or 8260.
- It appears that the dissolved oxygen concentration in the monitoring wells is lower than optimal for aerobic bio-degradation, even in RW-1 where air bubbling is occurring. Please enhance the dissolved oxygen in the northern section of the site. This may require sparging in the air sparge wells or the addition of oxygen or oxygen releasing compound.

Please inform our office how you will increase the dissolved oxygen at the site. You may contact me at (510) 567-6765.

Sincerely,

Barney M. Chan

Barney M. Chan
Hazardous Materials Specialist

C: B. Chan, files
Mr. G. Vander Veen, The IT Group, 2201 Broadway, Suite 101, Oakland CA 94612-3023

Monchg1001SPAve

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION (LOP)
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

May 6, 1999
StID #3858

Mr. Paul Supple
ARCO Products Co.
PO Box 6549
Moraga, CA 94570

Re: ARCO Station No. 2035, 1001 San Pablo Ave., Albany CA 94706

Dear Mr. Supple:

Our office has received and reviewed the quarterly groundwater monitoring report for the first quarter 1999 for the above site as prepared by Pinnacle Environmental Solutions. I have the following observations:

- SVE results indicate that the removal of volatile petroleum hydrocarbons may have reached levels of diminishing return
- Prior to evaluating this site for "low risk" closure, you will need to verify the MTBE concentrations in groundwater using a GC/MS method, EPA 8240 or 8260. I recommend that this verification be done on at least samples from MW-3 and MW-4.
- It appears that you may be able to reduce groundwater monitoring from quarterly to semi-annually without compromising your data.

Please incorporate confirmation of MTBE in your next monitoring event and inform our office if you believe any change in monitoring should be made.

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

C: **B. Chan, files**
Mr. G. VanderVeen, Pinnacle Environmental Solutions,144-A-Mayhew Way, Walnut Creek CA 94596

Mon1001SanPablo

EMCON
1921 Ringwood Avenue • San Jose, California 95131-1721 • (408) 453-7300 • Fax (408) 437-9526

BP 100

March 19, 1997
Project 20805-116.008

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502

Re: Purge or non-purge sampling procedures

Dear Mr. Chan:

On behalf of ARCO, EMCON has prepared this letter to inform you that we will be sampling wells at ARCO Stations 276 and 2185 in Oakland and 2035 in Albany, California, per the requirements set forth in the San Francisco Bay Regional Water Quality Control Board's letter dated January 31, 1997, regarding utilization of non-purge approach for sampling of monitoring wells impacted by petroleum hydrocarbons, BTEX and MTBE. EMCON will gauge depth to water in each well before sampling to ensure the RWQCB's procedures are met.

If you have questions on the sampling procedures, please call.

Sincerely,

EMCON

John C. Young, R.G.
Project Manager

cc: Paul Supple, ARCO

EMCON
1921 Ringwood Avenue • San Jose, California 95131-1721 • (408) 453-7300 • Fax (408) 437-9526

April 2, 1996
Project 20805-120.005

Mr. Mike Whelan
ARCO Products Company
PO Box 612530
San Jose, California 95131

Re: Meeting Minutes from ARCO/ACHCSA Status Meeting, October 25, 1995

Dear Mr. Whelan:

The meeting began at 10:00 with introductions and general discussion. Attending the meeting were Barney Chan and Susan Hugo of Alameda County Health Care Services Agency (ACHCSA); Mike Whelan of ARCO Products Company (ARCO); John Young of EMCON; and Kelly Brown of Pacific Environmental Group (PEG).

GENERAL TOPICS

The first general topic discussed on the agenda was the ASTM's Risk Based Corrective Action "RBCA". Mr. Whelan asked if ACHCSA has attended any workshops on RBCA and the County's general policy on implementation. Ms. Hugo responded that Kevin Graves of the Regional Water Quality Control Board (RWQCB) recently spoke to the ACHCSA group regarding RBCA and that the group has attended several past talks or workshops. Ms. Hugo stated that if a site passes the Tier 1 criteria (the more conservative numbers) the site could be moved towards closure, or if it failed, the site could be evaluated against the Tier 2 criteria or cleaned to meet the Tier 1 criteria. Mr. Chan stated that he already uses the Risk Based Screening Level tables to evaluate sites with dissolved groundwater plumes. It was noted that the several ACHCSA regulators are very receptive to the RBCA approach.

The next topic on the agenda was the State Water Resources Control Board (SWRCB) Resolution 92-49 "Containment Zones" (formerly non-attainment zone). Both Ms. Hugo and Mr. Chan stated that containment zones would typically be implemented on larger sites, such as terminals, industrial areas with commingled plumes and not your standard retail gas station sites. Mr. Whelan stated that ARCO would implement long term verification monitoring instead of formal containment zones and Mr. Chan and Ms. Hugo thought that would be acceptable.

The next general topic was quarterly reporting. Ms. Hugo and Mr. Chan inquired about the frequency and rational for sampling every well each quarter. Mr. Whelan said a table would be presented to Ms. Hugo with the minutes from the previous ACHCSA meeting that would explain the schedule and rational for reduced groundwater sampling. Mr. Young and Mr. Whelan briefly discussed the changes that would be made to the up coming quarterly reports. Mr. Young said that the historical tables and text would be reduced on three of the four quarters to reduce the size and repetitive information presented in each report.

The last general topic on the agenda was the ACHCSA's general approach towards closure. Mr. Chan said it was site specific, on a case by case basis. Once the ACHCSA decides that a site should be closed, a case closure summary form is completed and is submitted to the RWQCB for review and concurrence. Mr. Chan stated that once a site is closed the agency has no authority to review closer reports based on an administrative and financial rule. Additionally, if wells are to be decommissioned, it is at the discretion of the RP.

SITE STATUS

Mr. Brown began by discussing the status of ARCO stations #2107 and #4494. Minutes for these sites were submitted by Mr. Brown under seperate cover.

#2035, 1001 San Pablo Avenue, Albany

Ms. Hugo stated that she is the case worker for the Shell station located across Marin Avenue, while Mr. Chan handles the ARCO site. Ms. Hugo said that Shell had some concern regarding the observed floating in their off-site well S-5. A Shell site plan was spread out displaying the location of the Shell well in regards to the ARCO site. Ms. Hugo asked if ARCO and Shell had a working relationship. Mr. Whelan stated that they would be willing to work with Shell. Mr. Young asked Ms. Hugo if she could contact Shell and see if EMCON could access their well. Ms. Hugo said she would ask Shell Oil.

Mr. Young displayed a site plan and explained the historic source removal performed at the site. The UST's were removed in July/August 1991. Approximately 350 cubic yards were excavated from around the former tank complex and pump islands and disposed of off-site. Mr. Chan said the treatment system has not operated much since startup. Mr. Young agreed and stated that groundwater elevations came up in the winter and spring of 1994 and submerged the vapor wells, in addition, the East Bay Municipal Utility District (EBMUD) required EMCON to shut down the treatment system after EMCON reported

that Arsenic concentrations were above discharge limits. EMCON requested a variance from the EBMUD and received an increased discharged limit after several months of down time.

Mr. Young continued with a review of the system performance. In July, 1995, after groundwater elevations decreased, the vapor flow the wells was increased to 80 scfm from 20 scfm. Based on recent laboratory analysis for TPHg concentrations in air, the treatment system is removing approximately 22 lb. per day and roughly 600 lb. a month. Mr. Young explained that the treatment system has a radius of influence (ROI) of approximately 20 to 28 feet, depending on the well. Mr. Young added that based on the ROI the treatment system may be removing hydrocarbons from the street where Shell well S-5 is located. Mr. Young and Mr. Whelan again asked Ms. Hugo if she may contact Shell Oil to verify if ARCO could have access to their well to measure depth to water. Mr. Young proceeded to describe the groundwater treatment system, explaining the pumping rate from RW-1 is 1.5 to 2 gpm, and drawdown has been observed in the well to be approximately 11 to 12 feet. Based on the capture from the pumping test calculations the radius of influence would encompass the entire site. Mr. Young continued by reiterating that this is the most optimum time to remediate soils as groundwater is typically at it lowest levels during the year. In addition, Mr. Young said the system is designed to allow for the bubbling of air in extraction well RW-1 if any sheen or free product is detected. Mr. Chan asked if the air sparge system is running. Mr. Young said it is currently not running as we are still evaluating the SVE data and are waiting to see a drop off in the influent concentrations before turning on the air sparge system. EMCON will continue to optimize the systems performance over the next six months.

#2185, 9800 East 14th Street, Oakland

Mr. Young started by displaying a site plan and discussing the removal of the UST's and piping in October and November 1991. Approximately 1050 cubic yards of soil and 10,000 gallons of groundwater were removed from the site. Mr. Young informed Mr. Chan that off-site wells MW-9 and MW-10 were installed. The results of laboratory analysis of soil and groundwater sampling indicated no detectable gasoline hydrocarbons. A report documenting the results will be submitted the beginning of November 1995. Mr. Young the provided a chromatograph of the groundwater laboratory analysis for off-site well MW-7. The chromatograph indicated three compounds eluting in the gasoline range, PCE, TCE and DCE. The chromatographs for the on-site wells did not indicate the presence of any chlorinated compounds. Mr. Young said the results would be incorporated into the third quarter monitoring report.

A site map of the groundwater concentrations was displayed to Ms. Hugo and Mr. Chan. Mr. Young explained the laboratory results from the second quarter indicated a continued decrease in dissolved gasoline concentrations. Mr. Young and Mr. Whelan then presented the preliminary results of sampling for various bioremediation parameters. The results appear to collaborate with the trends seen in groundwater concentrations.

Mr. Young and Mr. Whelan than recapped what has happened at the site, the site appears to have limited risk based on the following: source removed, no free phase hydrocarbons, no migration, dissolved concentrations are decreasing and future land use indicates that the site will stay paved as ARCO is the owner.

Mr. Young then reviewed the future groundwater sampling schedule with Mr. Chan and Ms. Hugo. (see attached table).

#0276, 10600 MacArthur Boulevard, Oakland

Mr. Young began by discussing the second quarter groundwater monitoring map. The map displayed the concentrations of TPHG and benzene in groundwater in shallow zone wells MW-2 and MW-7. The deeper zoned wells continued to be non detect for gasoline. Mr. Whelan and Mr. Young noted that the concentrations of dissolved gasoline in wells MW-2 and MW-7 has declined with time. In addition, the composition of the gasoline has degraded to heavier end compounds. Mr. Young explained that the reasons for the decrease in lighter end compounds (benzene) is due to the remediation system ARCO has installed on-site and off-site, source removal and intrinsic biodegradation. Mr. Chan asked if ARCO could measure depth to water and collect groundwater samples from the vapor wells. Mr. Whelan stated that they have measured depth to water in the past to confirm flow direction in the shallow or perched zone. Mr. Young said that water is not currently present in the vapor wells but if it does reappear, EMCON would collect data measurements.

Mr. Young displayed a site plan of the PCE concentrations detected in groundwater monitoring wells. The shallow zoned monitoring wells continued to be non-detectable for PCE. The deeper zoned wells ranged from ND in MW-8 to 3,100 ppb in MW-4. Mr. Young explained that the concentrations appear to be consistent with past events. Mr. Young brought up the fact that the groundwater flow direction and concentration gradient for the entire regional area has not been evaluated due to a lack of site investigation and sampling data from wells on Drake Builders property. Mr. Chan stated that Drake is currently excavating soils in and around Young's Dry Cleaners. Mr. Whelan asked if ACHCSA has received any reports documenting the field work performed in March 1995. Mr. Chan said he has not received any reports. Mr. Chan stated that he thought Augeas

Consulting might not be the environmental consultant for the site as All Environmental of San Ramon, CA is performing the excavation work. Mr. Whelan stated that All Environmental might be a subcontractor to Augeas. Mr. Whelan said that ARCO received a letter from Garrison Law firm stating that ACHCSA had given Drake Builders the approval to excavate soils in the immediate vicinity of the ARCO site. Mr. Chan stated that he approved All Environmental to perform the work outlined in Augeas workplan. The workplan called for the excavation of soils in the vicinity of Young's cleaners and not near the ARCO site.

Mr. Chan asked if the SVE system is running. Mr. Young said the system is currently down as the influent concentrations were below the method reporting limit. Mr. Young stated that EMCON is evaluating the SVE system to determine the feasibility of continued operation with the current abatement unit. Mr. Young said to date the system has removed approximately 7710 lb. of gasoline, with 3940 lb. coming from the off-site well field.

Mr. Chan asked if ARCO still wants to enhance its off-site system. Mr. Whelan said he does not expect to at this time. Mr. Whelan stated that based on the detection of compounds not related to the ARCO facility being identified in soils and groundwater in the immediate off-site area, and the continued decrease in gasoline concentrations, ARCO does not expect to install an enhanced off-site well field. Mr. Young said EMCON will continue to pulse the current system if hydrocarbons in vapor are present. Mr. Whelan said ARCO is expected to pursue a long term monitoring program at the site or evaluate RBCA.

Sincerely,

EMCON

John C. Young
Project Manager

Attachments: Table 1

cc: Mr. Barney Chan, ACHCSA
Ms. Susan Hugo, ACHCSA

B\H:\ARCO\ACHCMINT.DOC-94\jcy:1

Table 1
Sampling Schedule

ARCO Site Number/ Address	Well ID	Chemical History	Location Relative to Plume	Proposed Sampling Schedule
2185	MW-1	11 consecutive quarters of ND	Up-gradient well	Annual (1st quarter)
9800 14th St.	MW-2	Contains TPHG/ BTEX	Within	Quarterly
Oakland	MW-3	Contains TPHG/ BTEX	Within	Quarterly
	MW-4	11 consecutive quarters of ND	Outside southern edge	Annual (1st quarter)
	MW-5	Contains TPHG/ BTEX	Within	Semiannual (1st & 3rd quarters)
	MW-6	Contains TPHG/ BTEX	Within	Semiannual (1st & 3rd quarters)
	MW-7	Contains non-typical gasoline	Down-gradient well	Quarterly
	MW-8	Contains TPHG/ BTEX	Within	Quarterly
	MW-9	1 quarter of ND	Down-gradient well	Quarterly for two more ND events, then annual
	MW-10	1 quarter of ND	Cross-gradient well	Quarterly for two more ND events, then annual
2035	MW-1	Contains TPHG/ BTEX	Within	Quarterly
1001 San Pablo	MW-2	12 consecutive quarters of ND	Below leading edge	Semiannual (1st & 3rd quarters)
Albany	MW-3	Contains TPHG/ BTEX	Within	Quarterly
	MW-4	Has contained TPHG/ BTEX	Southern edge	Annual
	MW-5	9 consecutive quarters of ND	Up-gradient well	Annual (1st quarter)
	MW-6	9 consecutive quarters of ND	Outside southwest edge	Annual (1st quarter)
	RW-1	Contains TPHG/ BTEX	Within	Quarterly
276		No changes proposed for '96		
10600				
MacArthur Blvd.				
Oakland				

AGENDA

ARCO/Alameda County Health Care Services Agency Status Meeting

October 25, 1995
Oakland, California

1. **Introductions / General Discussion**

2. **General Topics**

- ASTM's Risk Based Corrective Action "RBCA" -
- Resolution 92-49 "Containment Zones"
- Quarterly Reporting - yearly complete data
  → data for that quarterly
- Closure/Verification Monitoring

3. **Site Status**

- #2107, 3310 Park Boulevard, Oakland — Shut off system (levels asymptotic) will be closed (100 ppb gas
  STID 3890
- #4494, 566 Hegenberger Road, Oakland — 58 ppm TPHgas lift on site
  STID 3854 RW-1 (6 in) - 4th Q sampling (recommend closure
- #276, 10600 MacArthur Boulevard, Oakland - Cl Solvents problem nearby site
  STID 3756 Vapor systems - (7700 lbs removed).
- #2035, 1001 San Pablo Avenue, Albany → access to Shell ~~[illegible]~~ -5 wells request
  STID -3858
- #2185, 9800 East 14th Street, Oakland — CZ
  STID 3876

ARCO Products Company
Monitoring and Response Plans

County Alameda - Public Health

Facility	Product Tanks DW	Product Tanks SW	Product Lines DW	Product Lines SW	ELECTRONIC Tank Monitor	Probe in Sump	LINE Leak Detector	Used Oil Tank DW	Used Oil Tank SW	Monitoring Plan
500 Macarthur Blvd Oak. PS 2716	✓		✓		✓	✓	✓			I
1407 Telegraph Ave. SH 3514	✓		✓		✓	✓	✓			I
86 S. Livermore Ave. SH 498	✓			✓			✓			IVA
7601 Hesperian Blvd. SL, PE 1808 5yr	✓		✓		✓	✓	✓	✓		IA
399 Rincon Ave Liv. SH 771		✓		✓			✓			III
1001 San Pablo, Albany LS 2035	✓		✓		✓	✓	✓			I
310 Park Blvd. Oak PS 2107	✓		✓		✓		✓			IIB
56 Davis St. SL. 2111		✓		✓			✓		✓	III, V
2601 PARK ST. ALAMEDA SH 2117 5yr	✓		✓		✓	✓	✓			I
2141 Center St. C.V. SS 2157	✓		✓		✓	✓	✓			I
29 W. GRAND AVE. OAK PB 2169		✓		✓			✓			III
800 E 14th St. Oakland BC 2185		✓		✓			✓			III
2 Hegenberger Rd. Oak XC 4494 5yr		✓		✓			✓			III
3160 Mac Oakland SH 4931		✓		✓			✓			III
2710 Castro Valley Blvd. SS 4977		✓		✓			✓			III
235 Seminary Ave. Oak PS 6002 5yr		✓		✓			✓			III
2491 Village Parkway Dublin RA 6041		✓		✓			✓			III
185 E. Stanley Liv. SH 6113	✓			✓			✓			IVA
5131 Shattuck Ave Oak SH 6148		✓		✓			✓			III

SH-7 PB-1
PS-2 BC-2
LS-1 RA-1
PE-1 SS-2

* # 566 Hegenberger Rd - approved closure & installation plan site contaminated.

5yr permits

Remediation

ALAMEDA COUNTY ENVIRONMENTAL HEALTH DEPARTMENT

ENVIRONMENTAL PROTECTION DIVISION
1131 Harbor Bay Parkway, Suite #250
Alameda, CA 94502-6577
Telephone (510) 567-6700
Fax Number (510) 337-9335

FAX COVER SHEET

DATE: August 16, 1995

TO: MICHAEL WHELAND

ARCO

FAX # (408) 377-8361

Total number of pages including cover sheet 2

FROM: SUSAN HUGO

NOTE: Per your request.

(SMILE) have a nice day.
DO SOMETHING FOR OUR ENVIRONMENT.

jdsb/0395

LIST OF ARCO SITES WITH UGT CLEANUP
(August 16, 1995)

STID#	ACHD CONTACT	ARCO#	ADDRESS
3629	Susan Hugo	2112	1260 Park Street, Alameda 94501
817	Amy Leech	5387	20200 Hesperian Blvd. Hayward 94541
3943	Scott Seery	2152	22141 Center St., Castro Valley 94546
3883	Susan Hugo	6113	785 E. Stanley Blvd., Livermore 94550
3873	Susan Hugo	771	899 Rincon Avenue, Livermore 94550
1053	Eva Chu	6041	7249 Village Parkway, Dublin 94568
779	Amy Leech	608	17601 Hesperian Blvd. San Lorenzo 94580
3876	Barney Chan	2185	9800 East 14th Street, Oakland 94603
3756	Barney Chan	276	10600 MacArthur Blvd. Oakland 94605
3874	Susan Hugo	4931	731 W. MacArthur Blvd. Oakland 94609
3884	Susan Hugo	374	6407 Telegraph Avenue, Oakland 94609
3626	Susan Hugo	6148	5131 Shattuck Avenue, Oakland 94609
3890	Barney Chan	2107	3310 Park Blvd. Oakland 94610
3854	Barney Chan	4494	566 Hegenberger Road, Oakland 94621
3793	Susan Hugo	2169	889 W. Grand Ave. Oakland 94607
3858	Barney Chan	2035	1001 San Pablo Avenue, Albany 94706
4275	Scott Seery	601	712 Lewelling Blvd. San Leandro 94579
744	Dale Kletke	2111	1156 Davis Street, San Leandro 94577

ALAMEDA COUNTY ENVIRONMENTAL HEALTH DEPARTMENT

ENVIRONMENTAL PROTECTION DIVISION
1131 Harbor Bay Parkway, Suite #250
Alameda, CA 94502-6577
Telephone (510) 567-6700
Fax Number (510) 337-9335

FAX COVER SHEET

DATE: June 27, 1995

TO: DAVID LARSON

FAX # (408) 453-0452

Total number of pages including cover sheet 2

FROM: SUSAN L. HUGO

NOTE: List of ARCO SITES & corresponding contact person.

(SMILE) have a nice day.
DO SOMETHING FOR OUR ENVIRONMENT.

jdsb/0395

(6/27/95) **LIST OF ARCO SITES WITH UGT CLEANUP**

STID#	ACHD CONTACT	ARCO FACILITY#	ADDRESS
3629	Susan Hugo	Station 2112	1260 Park Street Alameda 94501
817	Amy Leech	Station 5387	20200 Hesperian Blvd. Hayward 94541
3943	Scott Seery	Station 2152	22141 Center Street Castro Valley 94546
3883	Susan Hugo	Station 6113	785 E. Stanley Blvd. Livermore 94550
3873	Susan Hugo	Station 771	899 Rincon Avenue Livermore 94550
1053	Eva Chu	Station 6041	7249 Village Parkway Dublin 94568
779	Amy Leech	Station 608	17601 Hesperian Blvd. San Lorenzo 94580
3876	Barney Chan	Station 2185	9800 East 14th Street Oakland 94603
3756	Barney Chan	Station 276	10600 MacArthur Blvd. Oakland 94605
3874	Susan Hugo	Station 4931	731 W. MacArthur Blvd. Oakland 94609
3884	Susan Hugo	Station 374	6407 Telegraph Avenue Oakland 94609
3626	Susan Hugo	Station 6148	5131 Shattuck Avenue Oakland 94609
3890	Barney Chan	Station 2107	3310 Park Blvd. Oakland 94610
3854	Barney Chan	Station 4494	566 Hegenberger Road Oakland 94621
3793	Susan Hugo	Station 2169	889 W. Grand Ave. Oakland 94607
3858	Barney Chan	Station 2035	1001 San Pablo Avenue Albany 94706
4275	Scott Seery	Station 601	712 Lewelling Blvd. San Leandro 94579

ARCO Products Company
2000 Alameda de las Pulgas
Mailing Address: Box 5811
San Mateo, California 94402
Telephone 415 571 2400

ALCO
HAZMAT

91 SEP 13 PM 2:14

September 9, 1994

Ms. Susan Hugo
Alameda County Heath Care Services
80 Swan Way, Room 200
Oakland, CA 94621

Re: Transfer of ARCO Projects.

Dear Ms. Hugo:

The purpose of this letter is to inform you of changes that ARCO Products Company (ARCO) has recently made in regards to environmental consulting firms working on environmental projects at existing and former ARCO retail facilities. In an effort to promote consistency, be more proactive, streamline communications and reduce costs, ARCO has significantly reduced the number of environmental consultants performing assessment and remedial activities on these environmental projects. The consolidation, which took effect on 9/1/94, involves a reduction of approximately 75% to 80% of the consulting firms that ARCO previously used. ARCO firmly believes that this consolidation effort will dramatically streamline ARCO's communication process, both with your office and staff as well as with ARCO's remaining consultants. The consulting firms which ARCO will now use at retail facility environmental projects throughout the west (WA, OR, CA, NV and AZ) include: Brown & Caldwell, Delta Environmental, Emcon Associates, Pacific Environmental Group, and Secor.

Attached to this letter is a list of sites in your jurisdiction that have recently been transferred to one of the five consulting firms listed above. In most cases, these five consulting firms were already working on ARCO projects in your jurisdiction. Also included in the list is the name of the ARCO engineer responsible for the site. please don't hesitate to call the respective ARCO engineer or the consultant's regional contact if you have any questions regarding any of the projects.

The transfer of the projects from the former consultant to one of the five firms listed above should be completed by October 1, 1994. Shortly thereafter I will be contacting you to schedule a meeting to introduce you to the primary contacts at the consulting companies and to review the projects with your staff. Please contact me at (415) 571-2468 if you have any questions concerning this letter.

Sincerely,

Kyle Christie

ALAMEDA COUNTY HEALTH DEPT.

Facility Number	City	Address	New Consulting Firm	ARCO Engineer	ARCO Engineer phone number
276	Oakland	10600 MacArthur Blvd.	Emcon	Mike Whelan	415-571-2449
347	Oakland	2751 High Street	Brown & Caldwell	Brad Jones	213-486-0681
374	Oakland	6407 Telegraph Avenue	Pacific Env. Group	Mike Whelan	415-571-2449
601	San Leandro	712 Lewelling Blvd.	Emcon	Mike Whelan	415-571-2449
771	Livermore	899 Rincon Avenue	Emcon	Mike Whelan	415-571-2449
2035	Albany	1001 San Pablo Avenue	Emcon	Mike Whelan	415-571-2449
2107	Oakland	3310 Park Blvd.	Pacific Env. Group	Mike Whelan	415-571-2449
2111	San Leandro	1156 Davis Street	Emcon	Mike Whelan	415-571-2449
2112	Alameda	1260 Park Street	Pacific Env. Group	Mike Whelan	415-571-2449
2152	Castro Valley	22141 Center Street	Pacific Env. Group	Mike Whelan	415-571-2449
2162	San Leandro	15135 Hesperian Blvd.	Pacific Env. Group	Mike Whelan	415-571-2449
2169	Oakland	889 West Grand Avenue	Emcon	Mike Whelan	415-571-2449
2185	Oakland	9800 East 14th Street	Emcon	Mike Whelan	415-571-2449
4494	Oakland	566 Hagenberger Road	Pacific Env. Group	Mike Whelan	415-571-2449
4931	Oakland	731 West MacArthur Blvd.	Pacific Env. Group	Mike Whelan	415-571-2449
6002	Oakland	6235 Seminary Avenue	Emcon	Mike Whelan	415-571-2449
6041	Dublin	7249 Village Parkway	Emcon	Mike Whelan	415-571-2449
6113	Livermore	785 East Stanley Blvd.	Emcon	Mike Whelan	415-571-2449
6148	Oakland	5131 Shattuck Avenue.	Emcon	Mike Whelan	415-571-2449
9908	Oakland	8255 San Leandro Blvd	Brown & Caldwell	Brad Jones	213-486-0681

Your Emcon contact is Mr. Jay Johnson.
Your Pacific Environmental Group contact is Mr. Greg Barclay
Your Brown & Caldwell contact is Mr. Ron Zurlinden

CONSULTANTS CONTACTS

Consultant Name	ARCO Program Manager (APM)	Technical Coordinator (TC)	Area	Administrative Coordinator (AC)
Brown & Caldwell	Mikk Anderson 150 So Arroyo Pkwy Pasadena, CA 91109 (818) 577-1020 Fax (818) 795-6016	Ron Zurlinden 9616 micro Ave Sacramento, CA 95813-3449 (916) 444-0123 - - - Fax (916) 856-5277	NW	Mat Quinn 150 So Arroyo Pkwy Pasadena, CA 91109 (818) 577-1020 Fax (818) 795-6016
		Ron Halsey 16735 Von Karman, Suite 200 Irvine, CA 92714-4918 (714) 660-1070 - - - Fax (714) 474-0940	SW	
		Mike Higman 9040 Frairs Rd, Suite 220 San Diego, CA 92108 (619) 528-9090 - - - Fax (619) 528-9199	SW	
Delta	Jon Pesicka 27141 Aliso Creek Rd, Suite 270 Aliso Viejo, CA 92656 (714) 362-3077 Fax (714) 362-0290	Todd Galati 3330 Data Dr, Suite 100 Rancho Cordova, CA 95670 (916) 638-2085 - - - Fax (916) 638-8385	NW	Debbie Fluckiger 27141 Aliso Creek Rd, # 270 Aliso Viejo, CA 92656 (714) 362-3077 Fax (714) 362-0290
		Jon Pesicka (714) 362-3077 - - - Fax (714) 362-0290	SW	
Emcon	Jack Hardin 1921 Ringwood Ave San Jose, CA 95131-1721 (408) 453-7300 Fax (408) 437-9526	Rob Dixon 15055 SW Sequoia Pkwy, Suite 140 Portland, OR 97224-7712 (503) 624-7200 Fax (503) 620-7658	NW	Jeanette Memeo 1921 Ringwood Ave San Jose, CA 95131-1721 (408) 453-7300 Fax (408) 437-9526
		Jay Johnson 1433 N Ave Market Blvd. Sacramento, CA 95834-1943 (916) 928-3300 Fax (916) 928-3341	NW	

CONSULTANTS CONTACTS

Consultant Name	ARCO Program Manager (APM)	Technical Coordinator (TC)	Area	Administrative Coordinator (AC)
Emcon	Jack Hardin	Ric Morgan 120 Columbia, Suite 500 Aliso Viejo, CA 92656 (714) 362-1130 Fax (714) 362-1137	SW	Jeanette Memeo
Pacific Enviro Group	Debra Moser 2025 Gate Way Place, Suite 440 San Jose, CA 95110 (408) 441-7500 Fax (408) 441-7539	Greg Barclay 3050 Fite Circle, Suite 101 Sacramento, CA 95827 (916) 361-8091- - - Fax (916) 361-8094	NW	Norma Gutierrez 2025 Gate Way Place, Suite 440 San Jose, CA 95110 (408) 441-7500 Fax (408) 441-7539
		Cleve Solomon 650 N Sierra Madre Villa, Suite 204 Pasadena, CA 91107 (818) 351-4814 - - Fax (818) 351-4822	SW	
Seacor	David Childs 1913 Volcanic Dr. Benton, AR 72015-2161 (501) 776-3400 Fax (501) 776-3053	Jim Ritchie 90 New Montgomery St, Suite 620 San Francisco, CA 94015-4503 (415) 882-1548 - - Fax (415) 882-4406	NW	Cindy Malloy 1734 - 34th St Sacramento, CA 95816-7004 (916) 456-4333 Fax (916) 456-0110
		Kyle Emerson 1180 Nevada St, Suite 200 Redlands, CA 92374 (909) 335-6116 - - - Fax (909) 335-6120	SW	
		Bob Wilson 3485 Sacramento Dr, Suite A San Luis Obispo, CA 93401-7160 (805) 546-0455 - - - Fax (805) 546-0583	SW	

R0100

RESNA
Working To Restore Nature

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
FAX: (408) 264-2435

TRANSMITTAL

TO: Mr. Mark Thompson
Alameda County District
Attorney's Office
7677 Oakport Street, Room 400
Oakland, CA 94605

DATE: September 15, 1993
PROJECT NUMBER: 61026.02
SUBJECT: Site Status Updates
ARCO Various Station
PAGE No.: 1 of 2

FROM: John C. Young

WE ARE SENDING YOU:

COPIES	DATED	DESCRIPTION
		Site Status Update for ARCO Stations:
1	9/2/93	ARCO Station No. 601, 712 Lewelling Boulevard, San Leandro, California.
1	9/2/93	ARCO Station No. 6148, 5131 Shattuck Avenue, Oakland, California.
1	9/2/93	ARCO Station No. 6041, 7249 Village Parkway, Dublin, California.
1	9/2/93	ARCO Station No. 4494, 566 Hegenberger Road, Oakland, California.
1	9/2/93	ARCO Station No. 2185, 9800 East 14th Street, Oakland, California.
1	9/2/93	ARCO Station No. 1319, 365 Jackson Street, Hayward, California.
1	9/2/93	ARCO Station No. 362, 29900 Mission Boulevard, California.
1	9/2/93	ARCO Station No. 2107, 3310 Park Boulevard, Oakland, California.
1	9/2/93	ARCO Station No. 2035, 1001 San Pablo Avenue, Albany, California.
1	9/2/93	ARCO Station No. 771, 899 Rincon Avenue, Livermore, California.

RESNA
Working To Restore Nature

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
FAX: (408) 264-2435

TRANSMITTAL

TO: Mr. Mark Thompson
Alameda County District
Attorney's Office
7677 Oakport Street, Room 400
Oakland, CA 94605

DATE: September 15, 1993
PROJECT NUMBER: 61026.02
SUBJECT: ARCO Various Station
PAGE No.: 2 of 2

FROM: John C. Young

WE ARE SENDING YOU:

COPIES	DATED	DESCRIPTION
		Site Status Update for ARCO Stations:
1	9/2/93	ARCO Station No. 374, 6407 Telegraph Avenue, Oakland, California.
1	9/2/93	ARCO Station No. 2152, 22141 Center Street, Castro Valley, California.
1	9/2/93	ARCO Station No. 276, 10600 MacArthur Boulevard, Oakland, California

THESE ARE TRANSMITTED as checked below:

[ ] For review and comment [ ] Approved as submitted [ ] Resubmit ___ copies for approval

[X] As requested [ ] Approved as noted [ ] Submit___ copies for distribution

[ ] For approval [ ] Return for corrections [ ] Return ___ corrected prints

[X] For your files

REMARKS:
Copies: 1 to RESNA project file no. 61026.02

John C. Young, Project Manager

cc: Mr. Michael Whelan, ARCO
Mr. John Meck, ARCO Legal
Mr. John Jang, RWQCB
Mr. Gary Grimm, RWQCB
Ms. Eva Chu, ACHCSA
Mr. Richard Hiett, RWQCB
Ms. Susan Hugo, ACHCSA
Mr. Scott Seery, ACHCSA
Mr. Eddy So, COHFD
Mr. Hugh Murphy, COHFD
Mr. Barney Chan, ACHCSA
Mr. Rob Weston, ACHCSA

RESNA
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3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
FAX: (408) 264-2435

September 2, 1993
0902BCHA.2035
61026.02

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94624

Subject: Site Status Update for ARCO Station 2035, 1001 San Pablo Avenue, Albany, California.

Dear Mr. Chan:

This letter provides an update on investigation and remedial activities conducted for the above-referenced site. This update covers site activities performed during June, July and August 1993, and site activities anticipated for the month of September 1993.

June, July and August 1993 Activities

- Performed bi-monthly product removal from well RW-1 (when present).
- Submitted Second Quarter 1993 Quarterly Groundwater Monitoring report.
- Performed Third Quarter 1993 groundwater sampling event.
- Drilled and installed air sparge wells AS-1 and AS-2, and vapor extraction wells VW-7, VW-8, and VW-9.
- Performed a one day air sparge test, followed by a one day combination air sparge/vapor extraction test.
- Submitted remediation system design plans to City of Albany Building Department for review.

June, July and August 1993 Activities (continued)

- Received approval from the City of Albany Planning Commission on maximum noise levels allowed from the remediation system and the appearance of the proposed remediation compound.

Work Anticipated for September 1993

- Continue bi-monthly removal of floating product (if present).
- Based on a consistent groundwater flow direction over the past year of monthly monitoring at the subject site, ARCO will discontinue monthly monitoring as of September 1993, and continue quarterly sampling.
- Evaluate field results of one day air sparge test and one day combination air sparge/vapor extraction test.
- Begin equipment procurement for the interim remediation system.

If you have any questions or comments regarding this letter, please call us at (408) 264-7723.

Sincerely,
RESNA Industries Inc.

John C. Young
Project Manager

cc: Mr. Michael Whelan, ARCO Products Company
Mark Thomson, Alameda County District Attorney's Office
Richard Hiett, Regional Water Quality Control Board

RESNA
Working To Restore Nature

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
FAX: (408) 264-2435

April 19, 1993
0415BCHA.2035
61026.02

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94624

Subject: Site Status Update for ARCO Station 2035, 1001 San Pablo Avenue, Albany, California.

Dear Mr. Chan:

This letter provides an update on investigation and remedial activities conducted for the above-referenced site. This update covers site activities performed during March 1993, and site activities anticipated for the month of April 1993.

March 1993 Activities

- Performed bi-weekly product removal from well RW-1.
- Submitted Interim Remedial Action Plan (RAP) for Interim Soil and Groundwater Remediation to Regulatory Agencies.
- Continued preparation of report to include installation of new on and offsite monitoring wells.

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Site Status Update
ARCO Station 2035, Albany, California

April 19, 1993
61026.02

Work Anticipated for April 1993

- Continue monthly groundwater monitoring.
- Continue Bi-weekly removal of floating product.
- Upon receiving approval of RAP, continue and complete design and permitting of an interim soil and groundwater remediation system at the site. Design of the interim remediation system at the site has been delayed due to complications associated with the design and location of the remediation compound. These complications are the result of a small site, with a lack of available space away from residences and tank fill port locations. Design delays have been incurred as a result of having to re-configure equipment locations to maintain the required minimum distances from tank fill ports, vents, and pumps islands (to meet code requirements), and still maintain appropriate clearances for both fire department and ARCO tanker truck access. Review and approval of the proposed compound location was required by the ARCO truck terminal to insure that appropriate truck access and turning radii were available at the site. Additional design and permitting delays have been incurred due to the need to relocate PG&E's natural gas service piping and connection point to the opposite end of the site, and delays in determining whether 3-phase electrical service could be provided at the site. Other delays in design may result from the incorporation of air-sparging technologies into the interim remediation system design.
- Continue preparation of report to include installation of new on and offsite monitoring wells and schedule field work associated with performance of air sparging tests at the site.

If you have any questions or comments regarding this letter, please call us at (408) 264-7723.

Sincerely,
RESNA Industries Inc.

Joel Coffman
Project Manager

cc: Mr. Michael Whelan, ARCO Products Company
Mark Thomson, Alameda County District Attorney's Office
Richard Hiett, Regional Water Quality Control Board

RESNA
Working To Restore Nature

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
FAX: (408) 264-2435

February 23, 1993
0217BCHA.2035
61026.02

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94624

Subject: Site Status Update for ARCO Station 2035, 1001 San Pablo Avenue, Albany, California.

Dear Mr. Chan:

This letter provides an update on investigation and remedial activities conducted for the above-referenced site. This update covers site activities performed during January 1993, and site activities anticipated for the month of February 1993.

January 1993 Activities

- Performed bi-weekly product removal from well RW-1.
- Continued design and permitting of an interim soil and groundwater remediation system at the site. Remedial Action Plan is due to Regulatory Agencies on March 1, 1993.
- Continued preparation of report to include installation of new monitoring wells.

Site Status Update
ARCO Station 2035, Albany, California

February 23, 1993
61026.02

Work Anticipated for February 1993

- Continue monthly groundwater monitoring.
- Bi-weekly removal of floating product will continue.
- Continue design and permitting of an interim soil and groundwater remediation system at the site. Remedial Action Plan is due to Regulatory Agencies on March 1, 1993.
- Continue preparation of report to include installation of new monitoring wells.

If you have any questions or comments regarding this letter, please call us at (408) 264-7723.

Sincerely,
RESNA Industries Inc.

Joel Coffman
Project Geologist

cc: Mr. Michael Whelan, ARCO Products Company
Mark Thomson, Alameda County District Attorney's Office
Richard Hiett, Regional Water Quality Control Board

R0100

RESNA
Working To Restore Nature

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
FAX: (408) 264-2435

January 29, 1993
0129BCHA.2035
61026.02

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94624

Subject: Site Status Update for ARCO Station 2035, 1001 San Pablo Avenue, Albany, California.

Dear Mr. Chan:

This letter provides an update on investigation and remedial activities conducted for the above-referenced site. This update covers site activities performed during December 1992, and site activities anticipated for the month of January 1993.

December 1992 Activities

- Performed bi-weekly product removal from well RW-1.
- Performed groundwater monitoring and developed newly installed monitoring wells MW-4 through MW-6.
- Continued design and permitting of an interim soil and groundwater remediation system at the site. Remedial Action Plan is due to Regulatory Agencies on March 1, 1993.
- Received encroachment permit application back from CalTrans with a letter explaining they are planning to reramp the intersection of Marin and San Pablo in the very near future, and proposed well MW-7 would be affected. Upon evaluation of recently obtained environmental subsurface data regarding the Shell Service Station adjacent (north) of the ARCO site, monitoring

December 1992 Activities (Cont.)

well MW-7 will not be installed as it's proposed location is cross-gradient from the ARCO site and Shell currently has monitoring wells in this area.

Work Anticipated for January 1993

- Continue monthly groundwater monitoring.
- Bi-weekly removal of floating product will continue.
- Initiate preparation of report to include installation of new monitoring wells.
- Continue design and permitting of an interim soil and groundwater remediation system at the site. Remedial Action Plan is due to Regulatory Agencies on March 1, 1993.

If you have any questions or comments regarding this letter, please call us at (408) 264-7723.

Sincerely,
RESNA Industries Inc.

Joel Coffman
Project Geologist

cc: Mr. Michael Whelan, ARCO Products Company
Mark Thomson, Alameda County District Attorney's Office
Richard Hiett, Regional Water Quality Control Board

RESNA
Working To Restore Nature

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
Fax: (408) 264-2345

January 18, 1993
1118rhie
61078.02

Mr. Richard Hiett
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

Subject: Remediation Schedules for ARCO Sites in Alameda County, California.

Dear Mr. Hiett:

On behalf of ARCO Products Company (ARCO), RESNA has prepared these estimated schedules for remediation of sites under your regulatory oversight. These include ARCO Stations 276, 374, 2107, 2185, 4494 and 6148 in Oakland, California, ARCO Station 2035 in Albany, California, ARCO Station 2152 in Castro Valley, California, and ARCO Station 6041 in Dublin, California.

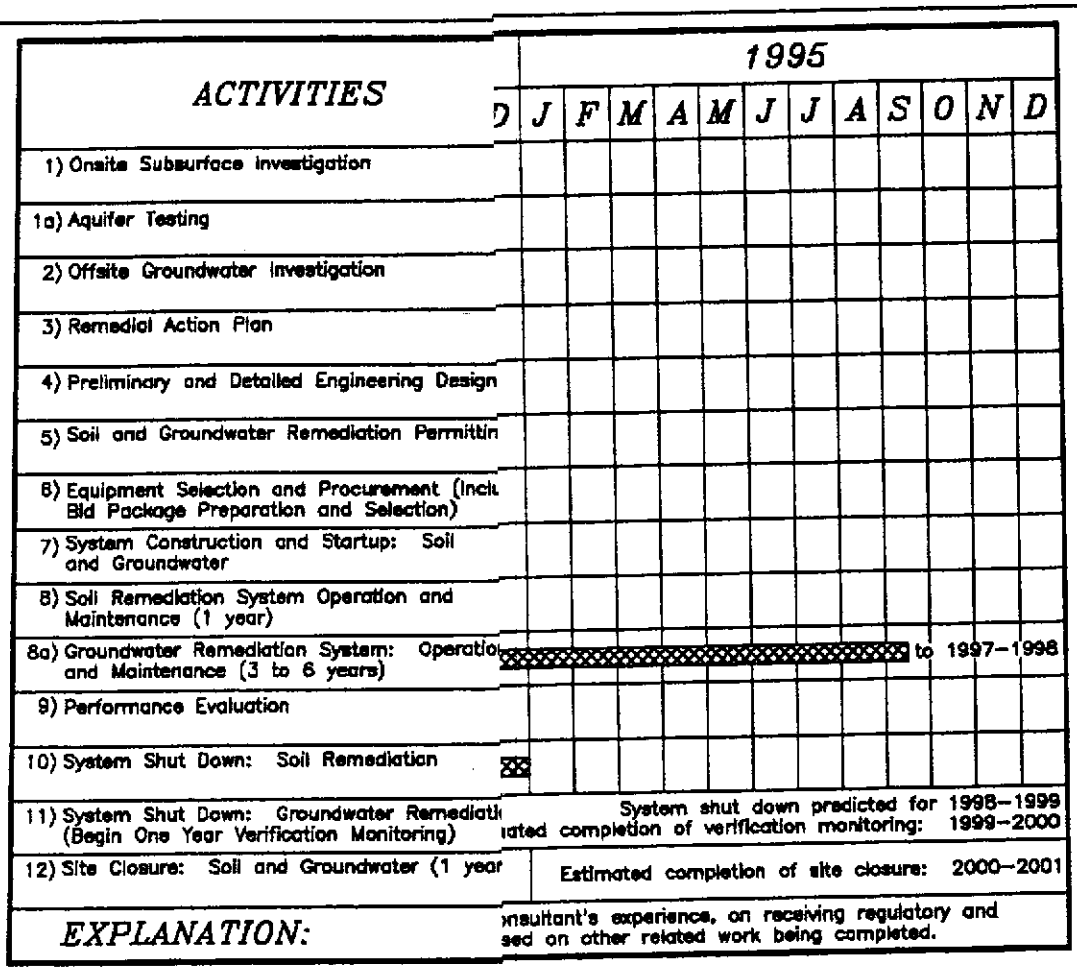
The darkened lines on the schedules represent deadlines which were agreed upon during the September 30, 1992 meeting at the Alameda County Health Care Services Agency (ACHCSA). The hatchered lines represent our best guess estimates of times which may be required to complete tasks should unforeseen delays occur. These unforeseen delays include permitting issues, offsite access issues, and estimated times of operation of the respective remediation systems.

If you have any questions or comments, please contact us at (408) 264-7723 or Mr. Michael Whelan of ARCO at (415) 571-2449.

Sincerely,
RESNA Industries Inc.

Joel Coffman
Project Manager

cc: Ms. Susan Hugo, ACHCSA
Mr. Michael Whelan, ARCO
Mr. John Meck, ARCO legal
Mr. Chris Winsor, ARCO
Mr. Mark Thomson, Alameda County D.A. (Cover Letter)



1 and 1a) Onsite Subsurface Investigation:
- Initial Onsite Assessment completed prior to 19
- Additional Onsite Subsurface Investigation and V submitted by December 1, 1992.
- Aquifer testing completed prior to 1992.

2) Offsite Groundwater Investigation:
- Delayed by 4 months due to encroachment per of Albany.
- Offsite Investigation Report to be submitted by combined with results of installation of additiona

3) Remedial Action Plan:
- Completion of offsite investigation will not affect
- RAP due to ACHCSA by March 1, 1993.

4) Preliminary and Detailed Engineering Design:
- Assumes no RAP revisions are necessary.
- Assumes no changes to design after regulatory
- Only onsite remediation needed.
- Design to be completed by April 1, 1993.

5) Permitting (Soil and Groundwater):
- Assumes no design changes will make additiona modification of treatment system.
- Permitting to be completed by May 1, 1993.
- Also assumes no special regulatory agency, city places special permitting requirements on this pr

ation:
gat system will effectively remove hydrocarbons from soil
Vpacted areas and will reduce concentrations significantly

at additional vapor and groundwater extraction wells are
ctively remediate impacted areas once the treatment sys-

ion to be completed by January to March 1994.

il Remediation System:
pleted in approximately 1 year after startup.
tem expected to be shut down by October to December

oundwater Remediation System:
pleted approximately 3 to 6 years after startup.
erification groundwater monitoring will be required before
initiated.
ation system expected to be shut down sometime in 1998

il closure involve only drilling of confirmation borings and
ion at time of system shutoff.
oundwater closure involve only groundwater monitoring and
ion at system shutoff.
on agency concurrence within 1 year following completion
oring.
assessment will be necessary.

RESNA
Working to Restore Natu

SCHEDULE

PLATE

A

PROJECT 61078.02

RO 100

RESNA

Working To Restore Nature

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
Fax: (408) 264-2345

December 11, 1992
1211BCHA.2035
61026.02

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94624

Subject: Site Status Update for ARCO Station 2035, 1001 San Pablo Avenue, Albany, California.

Dear Mr. Chan:

This letter provides an update on investigation and remedial activities conducted for the above-referenced site. This update covers site activities performed during November 1992, and site activities anticipated for the month of December 1992.

November 1992 Activities

- Performed bi-weekly product removal from well RW-1.
- Performed groundwater monitoring.
- Installed two additional onsite monitoring wells and one offsite monitoring well, continued permitting with Cal-Trans and City of Albany for drilling and installation of additional offsite wells.
- Continued design and permitting of an interim soil and groundwater remediation system at the site. Remedial Action Plan is due to Regulatory Agencies on March 1, 1993.
- Submitted Final Third Quarter 1992 Quarterly Monitoring Report to ARCO and regulators.

RESNA
Working To Restore Nature

Site Status Update
ARCO Station 2035, Albany, California

December 11, 1992
61026.02

Work Anticipated for December 1992

- Submitted Final report of onsite vapor extraction well installation and vapor extraction test to ARCO and regulators bbefore the December 1, 1992 due date.
- Continue monthly groundwater monitoring.
- Bi-weekly removal of floating product will continue.
- Upon gaining Cal Trans and City of Albany permits, drill and install additional offsite wells.

If you have any questions or comments regarding this letter, please call us at (408) 264-7723.

Sincerely,
RESNA Industries Inc.

Joel Coffman
Project Geologist

cc: Mr. Michael Whelan, ARCO Products Company
Mark Thomson, Alameda County District Attorney's Office
Richard Hiett, Regional Water Quality Control Board

RESNA
Working To Restore Nature

Applied GeoSystems, Inc.
A RESNA Company

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
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November 6, 1992
1105BCHA.2035
61026.02

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94624

Subject: Site Status Update for ARCO Station 2035, 1001 San Pablo Avenue, Albany, California.

Dear Mr. Chan:

This letter provides an update on investigation and remedial activities conducted for the above-referenced site. This update covers site activities performed during October 1992, and site activities anticipated for the month of November 1992.

October 1992 Activities

- Performed bi-weekly product removal from well RW-1.
- Performed groundwater monitoring.
- Continued permitting with Cal-Trans and City of Albany for drilling a installion of the offsite wells.
- Continued design and permitting of an interim soil and groundw remediation system at the site.

RESNA
Working To Restore Nature

Site Status Update
ARCO Station 2035, Albany, California

November 6, 1992
61026.02

Work Anticipated for November 1992

- Continue monthly groundwater monitoring.
- Bi-weekly removal of floating product will continue.
- Upon gaining Cal Trans and City of Albany permits, drill and install offsite wells.
- Submit draft report of onsite vapor extraction well installation and vapor extraction test to ARCO for review.

If you have any questions or comments regarding this letter, please call us at (408) 264-7723.

Sincerely,
RESNA Industries Inc.

Joel Coffman
Project Geologist

cc: Mr. Michael Whelan, ARCO Products Company
Mark Thomson, Alameda County District Attorney's Office
Richard Hiett, Regional Water Quality Control Board

Applied GeoSystems, Inc.
A RESNA Company

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TRANSMITTAL

TO: Ms. Susan Hugo
Alameda County Health Care Services
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94612

DATE: November 4, 1992
PROJECT NUMBER:
SUBJECT: Minutes for Meeting held on September 30, 1992.

FROM: Joel Coffman
TITLE: Project Geologist

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COPIES	DATED	NO.	DESCRIPTION
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REMARKS: cc: Mr. Michael Whelan, ARCO Products Company
Mr. Chris Winsor, ARCO Products Company
Mr. John Meck, ARCO Legal Department
Mr. John Jang, RWQCB, San Francisco Bay Region
Mr. Richard Hiett, RWQCB, San Francisco Bay Region
Mr. John Vargas, GeoStrategies

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November 4, 1992
1104shgo

Ms. Susan Hugo
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94612

Subject: Minutes to Meeting held at Alameda County Health Care Services Agency (ACHCSA) on September 30, 1992.

Dear Ms. Hugo:

On behalf of ARCO Products Company (ARCO), RESNA Industries, Inc. (RESNA has prepared these minutes for the meeting held at your offices on September 30, 1992. This meeting was held for discussion of ARCO sites located in Alameda County and under direction of Mr. Richard Hiett and Mr. John Jang of the Regional Water Quality Control Board (RWQCB). As circumstances dictated, these RWQCB personnel were not able to attend the meeting, however, they will receive a copy of these minutes. Attending the whole meeting were Ms. Susan Hugo of the ACHCSA, Mr. Michael Whelan of ARCO, and Mr. Joel Coffman of RESNA. People attending parts of the meeting while particular sites were discussed included Mr. Barney Chan and Mr. Scott Seery of the ACHCSA, Ms. Valli Voruganti of RESNA, and Mr. John Vargas and Ms. Diane Lundquist of GeoStrategies, Inc. An agenda for the meeting, including a listing of sites for discussion, was sent to the offices of the ACHCSA and the RWQCB prior to the meeting.

Items discussed include the following: ongoing assessment at the sites, offsite access problems, sites near ARCO Stations reported on leak lists, schedules and changes in schedules for remediation, and other issues concerning the sites. Specific topics discussed for each site are included in the following minutes to the meeting.

Attending the meeting during discussion of ARCO Stations 276, 2035, 2107, 2185, and 4494 were Mr. Barney Chan and Ms. Susan Hugo of ACHCSA, Mr. Michael Whelan of ARCO, and Mr. Joel Coffman and Ms. Valli Voruganti of RESNA. Site specific topics discussed are included in the following portion of these minutes.

ARCO Station 2035, 1001 San Pablo Ave., Albany, California

Discussion of this site included mention that product previously found in recovery well RW-1 was collected in a passive floating product skimmer and had been hand bailed on a bi-weekly basis. Floating product in RW-1 has been reduced to a sheen. Ms. Hugo asked for product information concerning the skimmers, this information has been sent. Other discussion included the fact that the onsite vapor extraction wells had been installed and a vapor extraction test performed at the site in August, 1992. Offsite monitoring wells will be installed upon gaining Cal-Trans permits for the wells. During discussion concerning additional onsite monitoring wells, Mr. Chan suggested moving one of our proposed monitoring well locations (located on the southwest corner of the site) to the north a few feet so it would be situated more downgradient from the former waste oil and former gasoline storage tanks.

The ACHCSA agreed that the report for installation of the onsite vapor extraction wells and the results of the vapor extraction test would be initiated now and delivered in final form to ACHCSA by **December 1, 1992.** Due to the delays associated with gaining permits from Cal Trans for offsite monitoring well installation (still not received at date of this letter), the report with results of the installation offsite monitoring wells will be combined with results of installation of the additional onsite monitoring wells. ACHCSA wishes to be informed of prolonged offsite access problems, including permitting delays and obtaining offsite owner permission for installation of offsite wells.

In regards to the remediation schedule for this site, it was mentioned that the installation of vapor extraction wells and performance of a vapor extraction test and the need for additional onsite monitoring wells were not included in the original schedules. The ACHCSA agreed to a revised remediation schedule which includes these phases of work. A remedial action plan is due to the ACHCSA on **March 1, 1993**, and the anticipated date for start-up of an interim remediation system is **July, 1993.**

ARCO Station 2107, 3310 Park Blvd., Oakland, California.

In discussions concerning this site, Ms. Hugo asked about the TPHd detected previously at the site. Mr. Whelan explained that ARCO was requesting all laboratory chromatograms from previously ran analyses for study. As ARCO has never stored diesel at this site, it is suspected that the TPHd is actually weathered gasoline, which can fall within the same detectable range as diesel in laboratory analyses.

It was explained that offsite monitoring wells had been installed at the site and that the groundwater recovery well, RW-1, would be installed in conjunction with construction of the

interim remediation system, which began October 19, 1992. This recovery well, RW-1, has now been installed. As the monitoring well MW-7, located immediately offsite and downgradient from the ARCO site has contained minor amounts of Benzene, it was agreed that no further assessment is needed at this time. The report including results of the installation of offsite monitoring wells and the recovery well is due to the ACHCSA on **January 1, 1993.**

ARCO Station 2185, 9800 E. 14th St., Oakland, California.

It was mentioned that the report documenting the underground storage tank removal and replacement had been issued by Roux Associates. ARCO mentioned that field work included in the recently completed subsurface investigation had been delayed until late June to early July, 1992, due to the delays related to the tank replacement activities at the site. The report for the subsurface investigation was issued in final form in September by RESNA. A work plan for additional work at the site will be prepared and submitted to the ACHCSA and RWQCB by **December 1, 1992.** Work to be proposed in the work plan will include installation of a groundwater recovery well, performance of an aquifer pumping and recovery test, installation of offsite groundwater monitoring wells, conducting an environmental records search, and performing a well survey to locate wells in the vicinity of the site.

In discussing the schedule for remediation at the site, it was also agreed that a Remedial Action Plan (RAP) will be prepared and submitted to the ACHCSA by **June 1, 1993** and that design of an interim remediation system would be completed by **August 1, 1993.** Equipment needed for the system will be ordered and received by **November 1, 1993,** with the anticipated date for system start-up to be **January 1, 1994.**

ARCO Station 4494, 566 Hegenberger Rd., Oakland, California

ARCO mentioned that after almost a year of negotiations, offsite access had been granted by the adjacent property owner in July, 1992, for installation of offsite monitoring wells. These wells were drilled and installed in July 1992 and the report detailing the findings from this monitoring well installation was delivered to the ACHCSA on October 29, 1992.

Concerning tank replacement at the site, Mr. Whelan stated that ARCO is attempting to gain approval for a station rebuild in conjunction with tank replacement at the site. Delays associated with gaining the permits and approval for the rebuild have pushed the anticipated start date for these activities to approximately the first quarter 1993. Ms. Hugo asked if ARCO was planning to excavate the area around monitoring well MW-2, the only hydrocarbon impacted part of the site, during tank replacement activities. Mr. Whelan

explained ARCO would not be able to excavate very far due to limitations posed by structures and the offsite properties adjacent to the site. It was generally agreed that over-excavation may be the only feasible alternative for this site.

ARCO Station 276, 10600 MacArthur Blvd., Oakland, California.

ARCO mentioned that the offsite monitoring wells, MW-6 and MW-7, had been installed in the Foothill Square Shopping Center parking lot. One well, MW-7, was screened in the shallow water bearing zone and the other well, MW-6, in the deeper water-bearing zone. It was brought to the attention of Mr. Chan and Ms. Hugo that, as suspected, the groundwater samples collected from the upgradient, offsite, deeper water-bearing zone (from MW-6) contained the highest concentrations of Tetrachloroethene (PCE) of any wells on or near the site. This information supports previous suspicions that the PCE and other VOCs found in the deeper water-bearing zone originate from an offsite source. Mr. Coffman pointed out that while the Foothill Square Site is listed in the Report on Releases of Hazardous Substances from Underground Storage Tanks (page 31, January 1992, Report No. 92-2CWP), it is listed only as a gasoline leak with no reference made to the VOCs. ARCO also mentioned that the ARCO site is listed in the same leak report, but is erroneously listed as a waste oil leak. This is an erroneous listing based on analytical results of soil samples collected during removal of the tank in 1988 (Pacific, February 6, 1989). The samples collected and analyzed for waste-oil compounds from the waste-oil tank pit and immediately surrounding area contained non-detectable concentrations for waste oil and volatile organic compounds. Therefore, there is no evidence of a waste oil leak at the site. Laboratory analysis data from installation of the offsite borings/wells had previously been sent to Mr. Chan along with the monthly site status letters prepared for each site in Alameda County. This data will be included in a report documenting recent onsite and offsite work at the site to be delivered to ACHCSA by **February 1, 1993.**

Onsite work recently completed at the site includes installation of 7 vapor extraction wells and an additional groundwater monitoring well. The new onsite wells were piped together into the existing offsite vapor extraction system. In late August, a vapor extraction performance test was conducted at the site to compare the performance of the existing offsite system, which uses soil vapor probes, with use of the system using the new onsite vapor extraction wells. Performance data collected during the test will be used to facilitate design and provide information concerning the number of offsite vapor extraction wells which will be needed to enhance operation of the offsite portion of the vapor extraction system. Results of the vapor extraction test will be included in the report to be issued by February 1, 1993.

ARCO discussed plans to add additional offsite vapor extraction wells to the existing offsite vapor extraction system. ARCO is now working to obtain access for future offsite well installations. It was agreed that the Remedial Action Plan previously submitted to the ACHCSA by ARCO concerning interim groundwater remediation (RESNA, March 18, 1992) would not be implemented by ARCO as the Deeper aquifer at the site is impacted by VOCs from an offsite source. It was also agreed that since the shallow perched aquifer at the site which is impacted by gasoline hydrocarbons will not sustain pumping, the perched water bearing zone will be remediated by the vapor extraction system. Based on the remediation schedules submitted for this site in February 1992, ARCO is either on schedule or ahead of schedule for work to be performed at this site.

Upon conclusion of discussion concerning Station 276, Mr. Barney Chan departed the meeting.

ARCO Station 374, 6407 Telegraph Ave., Oakland, California.

Discussion concerning this site centered around the fact the City of Oakland had recently re-zoned the area and that previously submitted engineering designs would now have to pass through a zoning department review process. This will slow down the installation and start-up of the interim remediation system by a minimum of 60 days. Ms. Hugo asked for names of personnel she might contact at the city concerning this matter and Ms. Voruganti provided her with a listing. The names included Mr. Chris Buckley of the zoning department and Ms. Diane Bradshaw of the planning department. With these new permitting delays, the date for initiating construction of the system at the site will be moved back to at least **January, 1993.** This will allow for a system start-up date of not before **March, 1993.**

In reference to other site-related items, Mr. Whelan and Mr. Coffman pointed out that a former Mobil Oil Service Station site, which is a potential secondary source of hydrocarbons in groundwater, is a located diagonally across Telegraph Avenue, approximate 120 feet southeast and upgradient/crossgradient of ARCO 374. The street address for this site is 6398 Telegraph Avenue.

This potential secondary source is currently a vacant lot owned by Givens Investment Company (Givens). The site is known to have had an underground-storage tank (UST) leak, as evidenced by placement of the site on the Report on Releases of Hazardous Substances from Underground Storage Tanks, State Water Resources Control Board, California Environmental Protection Agency, January 1992, Report No. 92-2CWP. The service station was present at this location from at least 1957 until at least 1985. According to the Report on Releases of Hazardous Substances from Underground Storage Tanks, the

leak was reported in April 1986 and was last reviewed in June 1990 and no action has been taken by the responsible party since the initial report of the leak. Actions recommended in the report regarding the former Mobile Station included removal of free product and excavation and treatment of contaminated soil.

Mr. Coffman made reference to an AquaScience Engineers report related to tank removal at the former Mobil site, which, Ms. Hugo requested a copy be forwarded to her and one has been sent. In the AquaScience Engineers report, dated May 27, 1986, it is stated that soils in the tank pit from removed tanks had a motor fuel smell and each tank pit contained water with floating product. The tank pits were excavated to a depth of twelve feet and groundwater was encountered at approximately twelve feet. The report states that the waste oil tank and one 5,000 gallon gasoline tank had holes in them when removed and inspected. Although water was pumped from the tank pits and disposed of, there is no record that any further investigation to evaluate and delineate the impact the leaking waste oil and gasoline tanks to groundwater at the former Mobil Station. Since the tanks were leaking directly into the tank pit which was in direct communication with the aquifer, it is probable there has been impact to the groundwater from these tanks. This may be a source of the gasoline hydrocarbons detected in groundwater samples from well MW-2 at the ARCO site, which is closest to the former Mobil site and upgradient from any possible ARCO source of gasoline hydrocarbons.

Ms. Hugo asked whether ARCO intended to install offsite groundwater recovery wells to be used in the groundwater remediation system. ARCO replied that once the system was operational and data had been studied, ARCO would evaluate the need for and feasibility of additional recovery wells. ARCO stated that permitting and gaining access for installation of offsite recovery wells which would then need to be piped into the groundwater remediation system could prove to be very difficult and take several months to accomplish.

Upon conclusion of discussion concerning Station 374, Ms. Valli Voruganti departed the meeting. The following three ARCO sites, 2112, 2169, and 4931 were discussed by Ms. Susan Hugo, Mr. Michael Whelan, and Mr. John Vargas and Ms. Diane Lundquist.

ARCO Station 2112, 1260 Park St., Alameda, California.

An Interim Remedial Action Plan was issued on August 27, 1992. This document discusses the remediation approach chose for this site. The System will include vapor extraction and groundwater pump and treat technologies. Previous vapor extraction and aquifer test data were to identify the number of required wells. All permits have been received at this time and construction is scheduled for October 19, 1992. The Remedial System is scheduled for start-up in February 1993.

An additional recovery well and down-gradient well were installed. Petroleum hydrocarbons in the down-gradient well were not observed.

Ms. Hugo asked if ARCO had a contingency plan to address potential breakdown of the system. GeoStrageties Inc., has prepared an Operation and Maintenance Plan. This Plan provides that any pumps or system equipment will be repaired. Telemetry will also be added to the system so that GeoStrageties Inc., will be notified as soon as there are system problems. Groundwater piping and the system enclosure slab have been designed for secondary containment.

Ms. Hugo asked how long the system will be operating. Soil clean-up should be relatively short and the anticipated groundwater clean-up duration as outlined in the schedule for this site is for five years. After an initial start-up and operation period, a better estimate may be possible.

Ms. Hugo asked about the number of carbon beds and their replacement schedule. The groundwater system will include two 180 pound carbon vessels. Calculations for the minimum replacement periods are included in the Interim Remedial Action Plan. The Operation and Maintenance Plan provides for monitoring the influent and effluent air and water systems on a routine schedule. Carbon will be replaced once breakthrough has been detected in the first carbon beds.

ARCO Station 2169, 899 W. Grand Ave., Oakland, California.

The Remediation Implementation schedule will be revised to accommodate delays in completing the onsite assessment. The original schedule assumed this assessment would be performed concurrently with the tank removal project. However, due to space limitations at the site caused by the large quantity of stockpiled soils during tank replacement, ARCO anticipates a 4-month delay in completing the assessment. This delay pushes back the estimated system start-up date to September 1, 1993.

The onsite assessment is to be completed at this time, Vapor extraction and aquifer tests have been completed. These remedial technologies appear to be feasible. The report documents these activities in a draft. Diesel was reported for previous groundwater samples at this site. Laboratory results for other ARCO stations have erroneously reported diesel. ARCO plans to do additional analysis to confirm whether diesel has impacted the soil and groundwater. A draft report has been submitted to ARCO. The report of onsite work and a Work Plan for offsite assessment will be issued in late October to early November, 1992.

ARCO Station 4931, 731 W. MacArthur Blvd., Oakland, California.

Mr. Vargas and Ms. Lundquist discussed the progress at his site. The Remedial System underground and enclosure has been completed. Equipment installation and start-up will be performed once all equipment is received from the manufacturers. GeoStrageties Inc., anticipated start-up by the first part of November.

A passive product skimmer has been installed in Well W-8. A products pump will be installed in this well when the system is operational. Recovery Well are AR-1 was installed adjacent to Well A-4 to address product in the well. A report documenting the installation of additional recovery wells is in draft. This report is scheduled for completion by the end of October early November.

Ms. Hugo wanted TOG and lead analyzed for four-quarters to verify that groundwater has not been impacted. ARCO agreed to analyze Well A-2 for these constituents.

Following this discussion, the meeting adjourned for lunch at 12:15 p.m.
After the lunch break, at approximately 1:15 p.m., the meeting resumed with Mr. Michael Whelan, Ms. Susan Hugo, and Mr. Joel Coffman present.

ARCO Station 6148, 5131 Shattuck Ave., Oakland, California.

Discussion began with Ms. Hugo granting approval for work proposed in work plan (RESNA, September, 1992) for installation of additional onsite monitoring wells. The report containing the results to the additional well installations is due to the ACHCSA on **February 1, 1993.** There was a question concerning the recently submitted 2nd quarter monitoring report for the site in which floating product was reported at 0.5 feet in one of the monitoring wells. Mr. Coffman said he would check into the matter as this was probably a mistake. A follow-up letter with corrected tables showing the correct product thickness of 0.05 feet was sent to Ms. Hugo.

Ms. Hugo requested that one of the wells (MW-1 through MW-3) be tested for all waste oil constituents, including TOG, TPHd, metals, VOCs, and 8270 for a minimum of 4 consecutive quarters. If no waste oil constituents are found, analysis for those constituents will be discontinued.

Ms. Hugo agreed it would be reasonable to decommission two of the three closely spaced monitoring wells, MW-1 through MW-3, located near the former waste-oil tank at the southwestern corner of the site. The wells to be decommissioned will be determined upon installation of the proposed additional monitoring wells and using data from 1 quarter of

monthly monitoring to establish the gradient at the site. The well to remain will be the well determined to be downgradient from the former waste-oil tank.

A work plan with proposed location of a groundwater recovery well, possible vapor extractions wells (if applicable), an aquifer test, and a vapor extraction test (if applicable) will be prepared and submitted to ACHCSA by **March 1, 1993**. The report documenting work in this work plan will be submitted to ACHCSA by **August 1, 1993**. A Remedial Action Plan (RAP) will begin to be prepared for the site as soon as results from the aquifer test and/or vapor extraction test are evaluated. The RAP is due to ACHCSA by **September 1, 1993**. The design and permitting of an interim remediation system at the site will begin in July, 1993, and is due to be completed by **October 1, 1993**. This schedule will allow for construction bids to be evaluated by **November 1, 1993**, which will provide a **February 15, 1994** construction date for the interim remediation system. This schedule will place start-up of the system at **April 1, 1994**.

Following discussion of this site, Mr. Scott Seery of the ACHCSA joined Ms. Susan Hugo, Mr. Michael Whelan, and Mr. Joel Coffman for the remainder of the site discussions.

ARCO Station 6041, 7249 Village Pkwy, Dublin, California.

Discussion concerning this site began with Mr. Seery providing some groundwater monitoring data from sites on different corners of the same intersection as the ARCO 6041 site. These sites included Unocal, BP, and Oil Changers (former Shell Oil Station) sites. The information provided by Mr. Seery showed monitoring wells on the northern perimeter (closest to ARCO site) that had or continue to have much higher levels of gasoline hydrocarbons in groundwater than wells on the ARCO site. As ARCO had presented the ACHCSA a work plan in which part of the proposed work was installation of offsite groundwater monitoring wells, it was agreed the offsite portion of the work would not proceed until some of the other responsible parties were contacted by the ACHCSA. ARCO would proceed with the onsite portion of work proposed in the work plan, which included a records search to identify potential offsite sources of hydrocarbons, installation of additional onsite monitoring wells, installation of onsite vapor extraction wells, and performing a vapor extraction test. The report for this portion of the work is due to ACHCSA on **February 1, 1993**.

Following three months monitoring of the new and pre-existing monitoring wells at the site to determine optimal positioning of a groundwater recovery well (RW-1), RW-1 will be installed and an aquifer test will be performed at the site. The report with results of the installation of the recovery well and aquifer test is due to ACHCSA on **August 1, 1993**. A Remedial Action Plan is due to the ACHCSA on **September 1, 1993**, and design of an

interim remediation system for the site is to be completed by **November 1, 1993.** With this schedule, construction bids should be secured by **December 1, 1993**, which will allow for construction of the interim remediation system to begin on **February 1, 1994.** This schedule provides for start-up of the system by **April 1, 1994.**

The offsite investigation was not placed on any definite schedule during the meeting due to information provided by Mr. Seery which showed the properties across the streets from the ARCO site (Unocal, BP, and former Shell sites) with groundwater impacted by greater concentrations of gasoline constituents than the ARCO site. This information concerning these properties across the street also indicated some of these sites with monitoring wells which are located near property boundaries (closest to the ARCO site) which contain groundwater with relatively high concentrations of gasoline constituents. Based on this information, it was agreed that any offsite investigation by ARCO will be delayed as other parties appear more likely to be responsible for offsite groundwater which may be impacted by gasoline constituents.

ARCO Station 2152, 22141 Center St., Castro Valley, California.

Discussion concerning this site was centered upon starting dates for construction of the soil vapor extraction system at the site. Mr. Whelan explained that the actual date for beginning construction at the site could vary anywhere **from mid-November 1992 to mid-January 1993,** due to internal ARCO factors associated with closing the station. Due to the amount of trenching to be performed for installation of remediation system piping, the site may have to be completely closed. In any event, the latest date given by ARCO for start-up of the system is **March 15, 1993.**

Groundwater has continued to contain non-detectable concentrations of gasoline hydrocarbons over the last few quarterly monitoring episodes and offsite investigation is not warranted. The extent of soils impacted by gasoline hydrocarbons has been delineated onsite.

ARCO Station 601, 712 Lewelling Blvd., San Leandro, California.

Mr. Seery said the contract between the City of San Leandro and ACHCSA was being worked out and was almost finished. He said this site was still considered to be in the deposit/refund section of oversight within the ACHCSA and would be transferred to the local oversight program (LOP) as soon as ACHCSA was granted the contract by the City. He requested a check from ARCO for $601.00 for time he has spent reviewing the project at his $71.00/hour rate.

The response letter to Mr. Seery's letter of July 30, 1992 was discussed next. Mr. Seery wanted to have additional soil borings near the former waste-oil tank drilled and sampled for waste-oil constituents. He cited the high (287.1 ppm) lead content in samples previously collected from Boring B-6/MW-1 as rationale for this request. Mr. Whelan suggested we are proposing to stop any offsite migration of these compounds in groundwater with the proposed groundwater recovery system to be installed at the site and that ARCO would sample the perimeter well (MW-8) in the downgradient direction from the former waste-oil tank to ascertain that these compounds had not migrated to the site perimeter. It was pointed out that the soils at the site are very impermeable and migration of compounds from the former waste-oil tank would be very unlikely as evidenced by results from the ARCO vapor extraction test and the Aquifer test performed across the street from the site at the former Shell Station.

Mr. Seery would not agree with this proposal and asked that well MW-1, located near the former waste-oil tank be sampled and analyzed for waste-oil constituents. As this well has historically contained floating product, we explained that matrix interference would probably result. Discussion followed about laboratories as Mr. Seery stated that someone at Pace Laboratories had told him we could run analyses for halocarbons, metals, the 8270, and TOG without interference by the product in the well. It was agreed that this issue would be further explored. Mr. Seery stated that on some occasions, there was no product in well MW-1 but this had not coincided with our scheduled sampling dates. He suggested, and ARCO agreed to be ready to sample MW-1 on any occasion in which there is no product present.

ARCO suggested that we collect soil samples in proposed soil boring B-17, to be located in the southeast corner of the site, crossgradient from B-6/MW-1, and analyze them for lead content to establish background levels for lead at the site. This was suggested in response to Mr. Seery pointing out that B-6 contained lead at up to 130 ppm in samples collected below first-encountered groundwater at the site. As lead doesn't readily migrate downward through clays and silts, Mr. Whelan suggested this may be indicative of a regional problem with lead in soils.

Concerning Mr. Seery's assertion that ARCO may be required to investigate the deeper water-bearing zone for possible hydrocarbon impact, he stated this may be required in the future. He stated that boring logs from the site showed bioturbation and roots at depths up to 16-1/2 feet. Mr. Coffman pointed out that soil samples collected from the clay aquitard beneath the site contained nondetectable amounts of gasoline hydrocarbons and that according to the GeoStrategies report concerning the former Shell site across the street from the ARCO site, no deeper aquifer was encountered at depths up to 25 feet below ground surface.

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Minutes to September 30, 1992 Meeting at ACHCSA November 4, 1992

It was discussed that we would have the report of additional on and offsite investigation to Mr. Seery approximately 16 weeks from the date agreement was reached on scope of work to be performed and that this schedule may be altered due to city and other offsite encroachment concerns.

Discussion concerning the remediation schedule for this site included ARCO informing Mr. Seery of the fact that City Planning and Engineering Departments were requiring plans and specifications for the trench remediation system to be signed and stamped by a Professional Civil Engineer. ARCO also informed Mr. Seery that permitting delays can be expected due to the complex nature of the interim remediation system to be installed. These delays will move the anticipated start-up date for the system to the third quarter of 1993 and possibly into the fourth quarter 1993.

Discussion concluded with agreement that ARCO and Mr. Seery would speak again the week of October 5, 1992 concerning this site. The meeting was concluded at approximately 5:15 p.m.

Mr. Joel Coffman and Mr. Seery spoke on October 9, 1992 regarding ARCO's decision to proceed with drilling and sampling three soil borings in the vicinity of the former waste-oil tank, as Mr. Seery requested. These borings were drilled and sampled by RESNA on October 12, 1992 and samples from these borings will be analyzed for the waste-oil constituents as outlined in Table 2 of the Regional Water Quality Control Board's August 10, 1990 recommendations.

If you have any questions or comments concerning these minutes to the meeting, please call us at (408) 264-7723.

Sincerely,
RESNA Industries Inc.

Joel Coffman
Project Geologist

cc: Michael Whelan, ARCO Products Company
Chris Winsor, ARCO Products Company
John Meck, ARCO Legal Dept.
John Jang, RWQCB
Richard Hiett, RWQCB
John Vargas, GeoStrategies

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October 16, 1992
1016BCHA.2035
61026.02

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94624

Subject: Site Status Update for ARCO Station 2035, 1001 San Pablo Avenue, Albany, California.

Dear Mr. Chan:

This letter provides an update on investigation and remedial activities conducted for the above-referenced site. This update covers site activities performed during September 1992, and site activities anticipated for the month of October 1992.

September 1992 Activities

- Performed bi-weekly product removal from well RW-1.
- Performed groundwater monitoring.
- Initiated preparation of the Additional Subsurface Environmental Investigation and Vapor Extraction Test Report.
- Continued permitting with Cal-Trans and City of Albany for drilling and installion of the offsite wells.
- Initiate design and permitting of an interim soil and groundwater remediation system at the site.

Work Anticipated for October 1992

- Continue monthly groundwater monitoring.
- Bi-weekly removal of floating product will continue.
- Drill and install offsite wells, and three additional vapor wells.
- Continue report preparation of onsite vapor extraction well installation and vapor extraction test.

If you have any questions or comments regarding this letter, please call us at (408) 264-7723.

Sincerely,
RESNA Industries Inc.

Joel Coffman
Project Geologist

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RESNA
Working To Restore Nature

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
Fax: (408) 264-2435

TRANSMITTAL

#3858

TO: Mr. E. Nacor
State of California
Department of Transportation
P.O. Box 7310
San Francisco, California 94120

DATE: October 13, 1992
PROJECT NUMBER: 69036.05
SUBJECT: Encroachment Permit to Install one Monitoring Well at ARCO Station 2035, 1001 San Pablo Avenue, Albany, California.

FROM: Barbara Sieminski
TITLE: Assistant Project Geologist

WE ARE SENDING YOU:

COPIES	DATED	NO.	DESCRIPTION
1	10/13/92	69036.05	Encroachment Permit for the above subject site.

THESE ARE TRANSMITTED as checked below:

[ ] For review and comment
[ ] Approved as submitted
[ ] Resubmit ___ copies for approval
[X] As requested
[ ] Approved as noted
[ ] Submit___ copies for distribution
[ ] For approval
[ ] Return for corrections
[ ] Return ___ corrected prints
[ ] For your files

REMARKS: cc: Mr. Michael Whelan, ARCO Products Company
Mr. Barney Chan, Alameda County Health Care Services Agency
Mr. Richard Hiett, Regional Water Quality Control Board

Copies: 1 to RESNA project file no. 69036.05

A RESNA Company

RESNA
Working To Restore Nature

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
Fax: (408) 264-2435

October 13, 1992
1013enac
69036.05

Mr. E. Nacor
State of California
Department of Transportation
Box 7310
San Francisco, California 94120

Subject: Street Encroachment Permit to Install One Monitoring Well and Conduct Offsite Subsurface Environmental Investigation at ARCO Station 2035, located at 1001 San Pablo Avenue, Albany, California.

Dear Mr. Nacor:

On behalf of ARCO Products Company (ARCO), RESNA Industries Inc. (RESNA) is requesting a street encroachment permit to install and monitor one groundwater monitoring well (MW-4) on the street adjacent to the property located at 1001 San Pablo Avenue in Albany, California (Plate 1) as part of an ongoing offsite subsurface environmental investigation. The proposed groundwater monitoring well will be installed in the sidewalk area on San Pablo Avenue as shown on Plate 2. After initial installation of the well, it will be monitored on a quarterly basis to determine changes in groundwater levels, and sampling to determine groundwater quality.

Description of Work

One soil boring (B-20) will be drilled using 10-inch-diameter hollow-stem augers approximately 35 feet below ground surface. Monitoring well (MW-4) will be constructed in the boring using a clean 2-inch diameter, thread-jointed, Schedule 40 polyvinyl chloride (PVC) casing. No chemical cements, glues, or solvents will be used in well construction. The casing bottom will be sealed with a threaded end-plug, and the casing top with a locking plug. The screened portion of the well will be constructed of machine-slotted PVC casing with 0.020-inch-wide (typical) slots. The screened section in the groundwater monitoring well will be placed to allow monitoring during seasonal fluctuations of groundwater levels. The annular space of the well will be backfilled with No. 3 sand, to approximately two feet above the top of the screened casing. A 1 to 2-foot-thick bentonite plug will be placed

above the sand as a seal against cement entering the filter pack. The remaining annulus will be then backfilled with a slurry of water, neat cement, and bentonite to approximately one foot below the ground surface. An aluminum traffic-rated utility box with a PVC apron will be placed over the wellhead and set in concrete, place flush with the surrounding ground surface. The wellhead cover will have a seal to protect the monitoring well against surface-water infiltration and requires a special wrench to open. The design discourages vandalism and reduces the possibility of accidental disturbance of the well. A typical monitoring well construction is shown on Plate 3.

The proposed monitoring well will be an important source of information concerning soils and groundwater in the immediate area of ARCO Station 2035 located at 1001 San Pablo Avenue in Albany, California. The installation and maintenance of the well will remain the responsibility of ARCO. A well construction permit will be acquired from Alameda County Flood Control and Water Conservation District, Zone 7 (ACFCWCD) prior to drilling, and an underground utility line locating company will be contracted to locate underground utilities.

If you have any questions regarding this request, please call us at (408) 264-7723.

Sincerely,
RESNA Industries Inc.

Barbara Sieminski

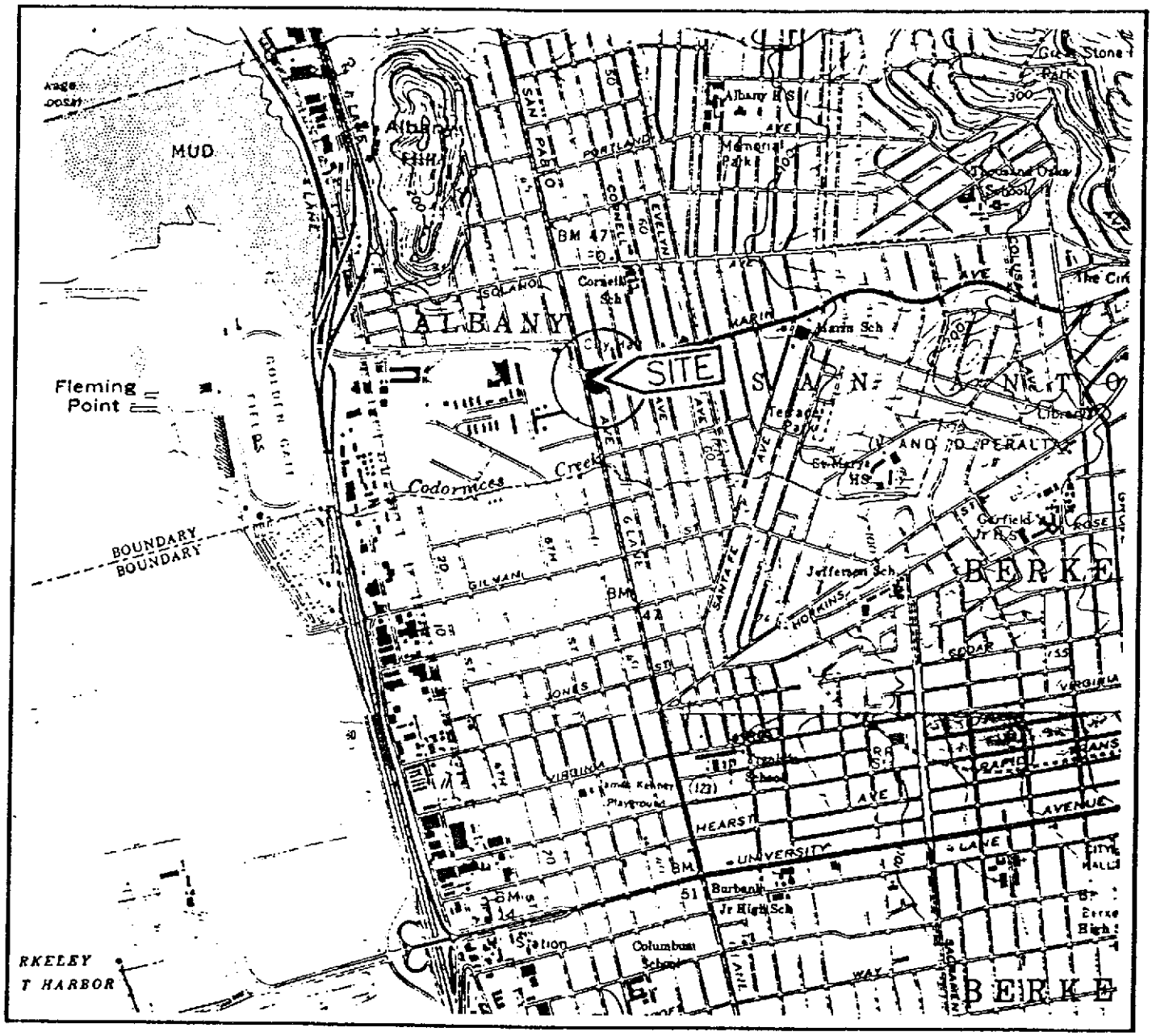
Barbara Sieminski
Assistant Project Geologist

Joel Coffman

Joel Coffman
Project Geologist

Enclosures:
Plate 1, Site Vicinity Map (five copies)
Plate 2, Proposed Boring/Monitoring Well Locations (five copies)
Plate 3, Typical Monitoring Well Construction (five copies)
Standard Encroachment Permit Application
Performance Bond for $2,000
Check No. 824, dated 10/13/92 for $260.00 (Permit Fee)

cc: Michael Whelan, ARCO Products Company
Barney Chan, Alameda County Health Care Services Agency
Richard Hiett, Regional Water Quality Control Board



Base: U.S. Geological Survey
7.5-Minute Quadrangles
Richmond/Oakland West,
California
Photorevised 1980

LEGEND

⊙ = Site Location

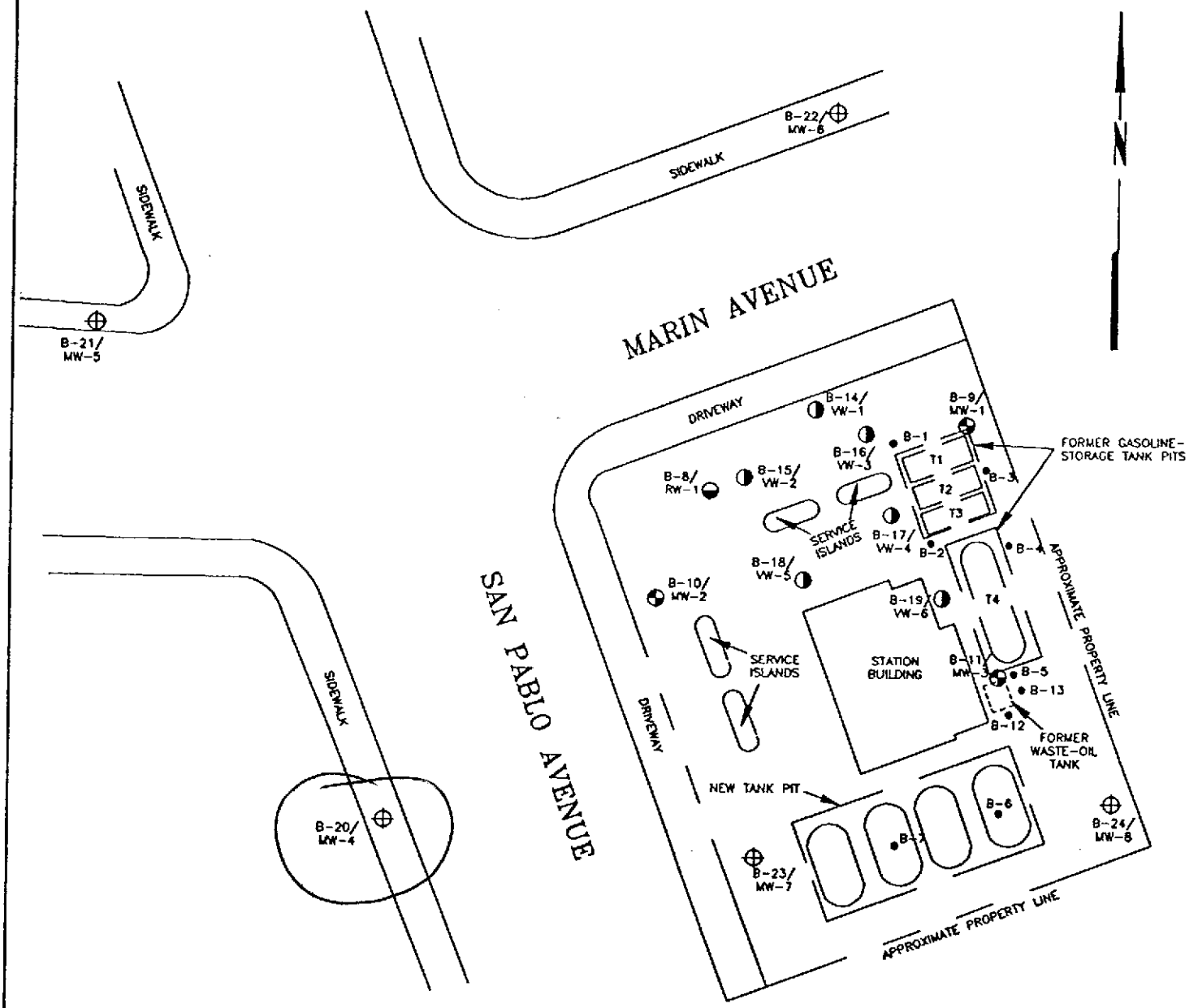
N

Approximate Scale

2000 1000 0 2000 4000

feet

RESNA	**SITE VICINITY MAP** **ARCO Station 2035** **1001 San Pablo Avenue** **Albany, California**	**PLATE** **1**
PROJECT 69036.05		



EXPLANATION

B-24/MW-8 ⊕ = Proposed monitoring well

B-19/VW-6 ◑ = Vapor extraction well (RESNA, Aug. 1992)

B-8/RW-1 ◒ = Recovery well (Exceltech, October 1991)

B-11/MW-3 ◒ = Monitoring well (Exceltech, October 1991)

B-13 ● = Soil boring (RESNA, Aug. 1989, June 1991, and Aug. 1992)

Approximate Scale

40 20 0 40 80

feet

Source: Surveyed by John E. Koch, Land Surveyor.

RESNA
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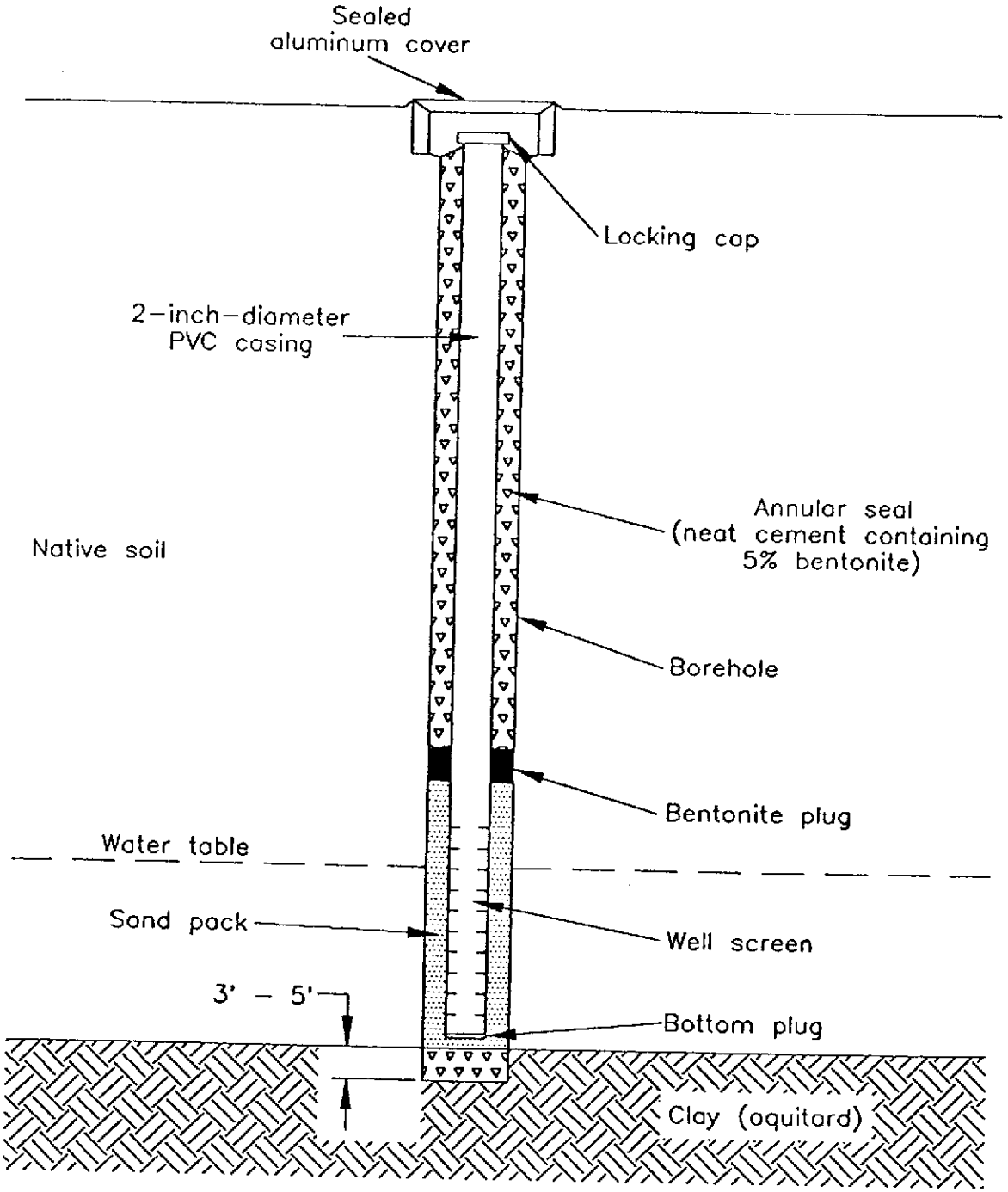
PROJECT 69036.05

PROPOSED BORING/ WELL LOCATIONS ARCO Station 2035 1001 San Pablo Avenue Albany, California

PLATE 2

GROUNDWATER MONITORING WELL



Not to scale

RESNA
Working to Restore Nature

PROJECT 69036.05

TYPICAL
MONITORING WELL CONSTRUCTION
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE
3

DEPARTMENT OF TRANSPORTATION (CALTRANS)

STANDARD ENCROACHMENT PERMIT APPLICATION

DM-M-P-201A (REV 1/90) PART A

Perm

Dist/Co/Rte/PM

Permission is requested to encroach on the State Highway right of way as follows: *(Complete all items: NA if not applicable.)* Application is not complete until all required attachments are included.

Location: City 1	County 2	Route 3	Post Mile 4	Date 5
ALBANY	ALAMEDA			

Address or Street Name 6	Cross Street *(distance and direction from site)* 7	FOR CALTRANS USE
1001 SAN PABLO AVENUE	MARIN AVENUE	

Portion of Right of Way 8	Work to be Performed By 9
WEST SIDEWALK (SEE PLATE 2)	☐ Own Forces ☑ Contractor

Est. Starting Date 10	Est. Completion Date 11	Estimated Cost in State R/W 12
OCTOBER 1992	OCTOBER 1992	$ 3,600

	Max. Depth 13	Average Depth 14	Average Width 15	Length 16	Surface Type 17
EXCAVATION	35 FL	NA FL	1 FL	NA FL	Concrete

	Type 18	Diameter 19	Voltage/PSIG 20	Product 21
PIPES	NA	NA	NA	NA

FULLY DESCRIBE WORK WITHIN STATE R/W: *Attach complete plans (5 sets folded 8½ x 11), specs, calcs, maps, etc., if applicable.*

One 10-inch-diameter soil boring will be drilled to the depth of approximately 35 feet below the ground surface, and 2-inch-diameter groundwater monitoring well (MW-4) installed in the boring. Monitoring well construction details are shown on attached Plate 3. After initial installation of the well, it will be monitored on a quarterly basis to determine changes in groundwater levels, and for sampling to determine presence of any groundwater contamination. The monitoring well will be an important source of information concerning soils and groundwater in the immediate area of ARCO Station 2035.

IS ANY WORK BEING DONE ON APPLICANT'S PROPERTY? *If "Yes" briefly describe and attach site and grading plans.* 22

☑ Yes ☐ No Monitoring and sampling of the onsite groundwater monitoring wells

IS A CITY, COUNTY OR OTHER AGENCY INVOLVED IN ENVIRONMENTAL APPROVAL? 23

☑ Yes (Check Documentation *type* and attach *approved copy*) well construction permit will be obtained from Alameda County Flood Control and Water Conservation District, Zone 7, prior to drilling

☐ Exempt ☐ N.D. ☐ EIR

☐ No (Check the category below which describes the project)

- ☐ SURVEY
- ☐ FLAGS, SIGNS, BANNERS DECORATIONS
- ☐ TEMPORARY SIGNALS
- ☐ PUBLIC UTILITY MODIFICATIONS, EXTENSIONS, HOOKUPS
- ☐ SIDEWALK/GUTTERS
- ☐ FENCE
- ☐ SINGLE FAMILY DWELLING DRIVEWAY
- ☐ REMOVAL-REPLACEMENT OF DISTINCTIVE ROADWAY MARKINGS
- ☐ DITCH PAVING
- ☐ MAILBOX
- ☐ PARADES, CELEBRATIONS
- ☐ COMMUNITY ANTENNA TV SYSTEM
- ☐ EROSION CONTROL
- ☐ AGRICULTURAL APPROACH
- ☐ MOVIE, TV FILMING
- ☐ MAINTENANCE, RECONSTRUCTION, OR RESURFACING OF A DRIVEWAY OF ROAD APPROACH
- ☐ MAINTENANCE OF EXISTING LANDSCAPING
- ☐ REGULATORY WARNING, INFORMATION SIGNS
- ☐ DITCH PAVING
- ☐ MODIFICATION OF TRAFFIC CONTROL SYSTEMS

☐ NONE OF THE ABOVE. IF PROJECT CANNOT BE DESCRIBED IN ABOVE CATEGORIES, REQUEST APPLICATION PART B FROM THE PERMIT OFFICE.

THE UNDERSIGNED AGREES THAT THE WORK WILL BE DONE IN ACCORDANCE WITH CALTRANS RULES AND REGULATIONS AND SUBJECT TO INSPECTION AND APPROVAL

Organization or Applicant	Phone	Architect, Engineer or Project Mgr.	Phone
RESNA Industries for ARCO	(408) 264-7723	Joel Coffman	(408) 264-7723

Address *(include city and zip code)*

3315 Almaden Expressway, Suite 34, San Jose, CA 95118

Authorized Signature	Title
Joel Coffman for Resna	

FEE CALCULATIONS
(For Caltrans Use Only)

[ ] Cash [ ] Charge [ ] Exempt

[ ] Set Fee [ ] AS (Estimated) [ ] AX (Actual Cost)

[ ] Major Project EA _____

Calculated By: _____ Fee/Deposit	(1) Initial Deposit Due	(2) Addl Deposit	(3) Total Fee
a. Bridge Toll (if Applicable)	$	$	$
b. Review [ ] Set Fee [ ] Calc Fee Estimated _____ Hrs @ $60 per hr Additional Rev & _____ P.E.E.R. Hours EA _____	$ _____ $ _____	$ _____ $ _____	$ _____ $ _____ $ _____ $ _____
c. Inspection [ ] Set Fee [ ] Calc Fee Estimated _____ Hrs @ $60 per hr EA _____	$ _____ $ _____	$ _____	$ _____ $ _____ $ _____
d. Field Work [ ] Cal Fee		$ _____	$ _____
TOTAL FEE/DEPOSIT			
	Collected by:	Collected by:	Collected by:
	Initial Deposit Paid $	Addl Deposit $	Total Fee $

	NO	Yes	Amount $
Surety Bond Required?	[ ]	[ ]	_____
Liability Insurance Required?	[ ]	[ ]	_____

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

PERFORMANCE BOND OF STATE HIGHWAY ENCROACHMENT PERMITTEE

TR-0001A (REV. 10/90)

[To Accompany the Permit]

Streets and Highways Code Section 677

BOND NO.: DLP0232701		PERMIT NO.:		PRINCIPAL: Resna Industries, Inc	
LOCATION	DIST.	CO.	RT.	P.M.	EFFECTIVE DATE:
BOND NUMBER	DLP0232701		**PREMIUM AMOUNT**	$100 + $10 Policy fee per ann	

Know All Persons by These Presents:

That Resna Industries, Inc, as **PRINCIPAL,** having an address for service of 42501Albrea St, Fremont, Ca 94538 and Ranger Insurance Company, a Surety Company qualified and duly licensed to do business in the State of California, as **SURETY**, are held and firmly bound to the **STATE OF CALIFORNIA**, as **OBLIGEE**, in the sum of Two Thousand and 00/100-----*

Dollars ($2,000.00------*), lawful money of the United States of America, to be paid to the **OBLIGEE**, for which payment, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally,

THAT THE CONDITION OF THIS OBLIGATION IS SUCH,

1. That whereas **PRINCIPAL** has made, or is about to make, application to the State of California for a permit under Article 2 of Chapter 3 of Division 1 of the Streets and Highways Code to place, change or renew an encroachment in, under or over any portion of a state highway, and Streets and Highways Code Section 677 requires a bond payable to the State of California as a condition therefore, this performance bond is executed and tendered in accordance therewith.

2. That this bond shall be subject to all of the terms and provisions of the afore-mentioned provisions of the Streets and Highways Code.

3. That if the **PRINCIPAL** shall fail to faithfully perform the work for which the encroachment permit was issued, then the **SURETY** herein shall pay for the same, otherwise this obligation is null and void.

4. No right of action shall accrue under this bond to or for the use of any person or entity other than the State of California.

5. That this bond shall be deemed continuous in form, remain in full force and effect, and run concurrently with the permit period and any and all renewals, or until cancellation or withdrawal of the **SURETY** from the bond. If no work has commenced under the encroachment permit, the **SURETY** may cancel this bond upon thirty (30) days written notice to the **OBLIGEE.**

6. That the **SURETY** shall bear no liability on this bond in the event the encroachment permit issued to the **PRINCIPAL** is cancelled or withdrawn prior to commencement of work on State property by the **PRINCIPAL.**

(SEE REVERSE SIDE)

PERFORMANCE BOND OF STATE HIGHWAY ENCROACHMENT PERMITTEE

TR-0001B (REV. 10/90)

7. This bond to become effective on October 1, 1992.

8. This bond is executed to comply with the provisions of Chapter 3 of Division 1 of the Streets and Highways Code and of Chapter 2, Title 14, Part 2 of the Code of Civil Procedure, and said bond shall be subject to all of the terms and provisions thereof.

NAME OF PRINCIPAL		DATE
Resna Industries, Inc		10/3/92
BUSINESS ADDRESS OF PRINCIPAL		
42501 Albrea St.,		
CITY	**STATE**	**ZIP CODE**
Fremont	Ca	94538
PRINT OR TYPE NAME OF AUTHORIZED SIGNATURE AND TITLE	**AUTHORIZED SIGNATURE AND TITLE**	
J. JOEL COFFMAN Project Manager	X Joel Coffman, Project Mgr.	

NAME OF SURETY:		DATE:
Ranger Insurance Company		10/3/92
BUSINESS ADDRESS OF SURETY:		
9920 Pacific Hts Blvd., #500		
CITY:	**STATE:**	**ZIP CODE:**
San Diego,	Ca	92121-4321

I certify (or declare) under penalty of perjury that I have executed the foregoing bond under an unrevoked power of attorney. Executed on (date) 10/3/92 ***In (city, state)*** San JOse, Ca ***under the laws of the State of California.***

PRINT OR TYPE NAME OF ATTORNEY-IN-FACT FOR SURETY:	SIGNATURE OF ATTORNEY-IN-FACT FOR SURETY:
D.L.Lowes	

RANGER INSURANCE COMPANY

c/o Douglass Financial Corporation • Corporate Office, San Diego, California

BOND
POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That the Douglass Financial Corp., a corporation duly organized and existing under the laws of California having its principal office in the City of San Diego, California, does hereby nominate, constitute and appoint: D.L.lowes of: San Jose, Ca

the true and lawful agent and Attorney-in-Fact of Ranger Insurance Company, pursuant to the attached Power of Attorney, to make, execute, seal and deliver for and on its behalf as surety, and its act and deed, any and all bonds, contracts, agreements of indemnity and other undertakings in suretyship provided, however, that the penal sum of $50,000.00

is granted and is signed and sealed by facsimile under and by authority of the Resolution adopted by the Board of Directors of the RANGER INSURANCE COMPANY at a meeting duly called and held on November 10, 1988.

IN WITNESS WHEREOF, the said Ranger Insurance Company has caused these presents to be executed by its Attorney-in-Fact; with its corporate seal affixed.

RANGER INSURANCE COMPANY CORPORATE SEAL 1923 DELAWARE

Date: October 3, 1992

R. Spencer Douglass, Attorney-in-Fact

STATE OF CALIFORNIA }
COUNTY OF SAN DIEGO }

On this 3rd day of October, 19 92, before the subscriber, a Notary Public of the State of California, in and for the County of San Diego, duly commissioned and qualified, came R. Spencer Douglass, Chairman of the Board of Douglass Financial Corp. and General Agent for Ranger Insurance Company, to me personally known to be the individual and officer described in and who executed the preceding instrument and he acknowledged the execution of the same, and being by me duly sworn, deposeth and saith, that he is the said officer of the Corporation aforesaid, and that the seal affixed to the preceding instrument is the Corporate Seal of said Company and that the said Corporate Seal and his signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Company.

IN WITNESS WHEREOF, I have hereunder set my hand and affixed my Official Seal, at the City of San Diego, the day and year first above written.

OFFICIAL SEAL
KATHLEEN TERRY
NOTARY PUBLIC-CALIFORNIA
SAN DIEGO COUNTY
MY COMMISSION EXPIRES
JANUARY 14, 1995

Notary Public

BOND
POWER OF ATTORNEY

This Power of Attorney is granted and is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the RANGER INSURANCE COMPANY at a meeting duly called and held on November 10, 1988, which said Resolution has not been amended or rescinded and of which the following is a true, full and complete copy.

"RESOLVED, That this Company do and it hereby does authorize and empower R. Spencer Douglass as Attorney-in-Fact under its corporate seal to

RESNA
Working To Restore Nature
3315 Almaden Expwy., #34 San Jose, CA 95118 (408) 264-7723

EXPLANATION	AMOUNT
Permit Fee	26000

11-35
1210

0824

PAY AMOUNT OF Two hundred sixty dollars 00/100 DOLLARS

CHECK AMOUNT $ 260.00

DATE	TO THE ORDER OF	DESCRIPTION	CHECK NUMBER
10/13	Caltrans	Job # 69036.05	824

Joel C. Johnson

BANK OF AMERICA Mission San Jose Branch 1095
P.O. BOX 3368 FREMONT, CA 94539

⑈000824⑈ ⑆121000358⑆ 10956⑈03218⑈

October 12, 1992

92 OCT 14 PM 12:55

Ms. Susan Hugo
Alameda County Department of Environmental Health
80 Swan Way
Oakland, California 94621

ARCO Products Company Facilities in Alameda County

Dear Ms. Hugo:

Please find attached, Quarterly Summary Reports (QSRs) for ARCO Products Company Service Stations in Alameda County. The QSRs summarize activities conducted by ARCO at the respective sites during the third quarter of 1992; also included are projected site activities for the fourth quarter of 1992 and a bibliography of reports submitted for each location.

The QSRs are classified by city and address within Alameda County. We are submitting this document and attached QSRs as agreed. Please note that we are forwarding copies of the QSRs to the Regional Water Quality Control Board (RWQCB).

Please note that ARCO Products Company has reviewed the RWQCB's February 19, 1991 printout of ARCO fuel leak sites. We have evaluated each site with respect to ARCO's responsibility for investigation, monitoring, and/or remediation. Those locations for which ARCO is not responsible were listed and described in the QSR package delivered to you on July 15, 1991. The attached QSRs therefore represent only those locations for which ARCO is responsible.

ARCO is planning the next comprehensive QSR submittal for ARCO sites on January 15, 1993. Please do not hesitate to contact us with any questions regarding this submittal.

Sincerely yours,

Kyle A. Christie
Environmental Engineer

Attachments: ARCO Facility QSRs

agenqsr.ltr
50013-004-06

UST LEAK SITE UPDATE

Date of Last Review/Update: June 29, 1992

Current Date: September 25, 1992

SITE IDENTIFICATION

Name: ARCO Service Station 2035 Case No.:

Address: 1001 San Pablo Avenue
Street Number Street

Albany 94706
City ZIP Code

County: Alameda Substance: Gasoline

Local Agency: Alameda County Health Care Services Agency

Regional Board: Regional Water Quality Control Board - San Francisco Bay Area

LEAD STAFF PERSON

ACHCSA - Barney Chan

CASE TYPE

____	Undetermined	____	Soil Only	__X__	Groundwater	____	Drinking Water

STATUS (Date indicates when case moved into status)

____	No Action Taken		
__X__	Leak Being Confirmed	Date	1/90
__X__	Preliminary Site Assessment Workplan Submitted	Date	4/29/91
__X__	Preliminary Site Assessment Underway	Date	7/1/91
__X__	Pollution Characterization	Date	10/91
__X__	Remediation Plan	Date	11/91
____	Remedial Action Underway	Date	
____	Post Remedial Action Monitoring	Date	
____	Case Referred to Regional Board	Date	
____	Case Referred to Dept. of Health Services	Date	
____	Case Closed	Date	

COMMENTS/MILESTONES:

USTs and product lines replaced in August - September 1991; impacted backfill excavated and aerated onsite. Treated soil removed to landfill. Installed three 4-inch diameter groundwater monitoring wells and one 6-inch diameter groundwater monitoring well. Performed aquifer pump test in November 1991. Drilled and installed vapor extraction wells VW-1 through VW-6, and performed a vapor extraction test (VET) in August 1992.

RECENT ACTIVITIES/FINDINGS:

Last Quarter Activities: Installed Horner EZY floating product skimmer in well MW-1. Submitted Addendum Three to Work Plan to regulatory agencies on May 26, 1992. Submitted First Quarter 1992 Quarterly Groundwater Monitoring Report to regulatory agencies. Performed monthly inspections of product skimmer.

Current Quarter Activities: Performed bi-weekly inspections of product skimmer. Drilled and installed six vapor extraction wells (VW-1 through VW-6) between August 19 and 21, 1992. Performed VET on August 25, 1992. Submitted Second Quarter 1992 Quarterly Groundwater Monitoring Report to regulatory agencies on August 31, 1992. Initiated obtaining street encroachment permits to install offsite wells.

ANTICIPATED ACTIVITIES:

Next Quarter Activities: ARCO to perform quarterly groundwater monitoring. Perform bi-weekly inspections of the product skimmer. Prepare quarterly groundwater report. Upon gaining offsite access, drill and install offsite wells.

Reports documenting the site's history are listed on page 2.

REPORT	DATE	CONSULTANT
Letter Report on Quarterly Groundwater Monitoring Second Quarter 1992 69036.04	8/31/92	RESNA
Addendum Three to Work Plan 69036.06	5/28/92	RESNA
Letter Report on Quarterly Groundwater Monitoring, First Quarter 1992 69036.03	5/4/92	RESNA
Subsurface Environmental Investigation and Pump Test 69036.02	3/6/92	RESNA
Addendum Two to Work Plan	9/24/91	RESNA
Underground Gasoline-Storage Tank Removal and Replacement 69036.03	9/11/91	RESNA
Work Plan for Subsurface Investigation and Remediation and Addendum One to Work Plan (AGS 69036-2).	4/29/91	RESNA/Applied GeoSystems
Limited Environmental Site Assessment AGS 69036-1	1/24/90	Applied GeoSystems

A RESNA Company

RESNA
Working To Restore Nature

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
Fax: (408) 264-2435

August 21, 1992
0811BCHA.2035
61026.01

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94624

Subject: Site Status Update for ARCO Station 2035, 1001 San Pablo Avenue, Albany, California.

Dear Mr. Chan:

This letter provides an update on investigation and remedial activities conducted for the above-referenced site. This update covers site activities performed during July 1992, and site activities anticipated for the month of August 1992.

July 1992 Activities

- Performed bi-weekly product removal from well RW-1.
- Performed groundwater monitoring.
- Initiated obtaining street encroachment permit to install three offsite groundwater monitoring wells.
- Initiated contact with the City of Albany regarding permitting requirements for installation of a future interim soil and groundwater remediation system.

Work Anticipated for August 1992

- Continue monthly groundwater monitoring.
- Submit Draft Second Quarter Monitoring Report to ARCO.

- Continue permitting for onsite well installations.
- Bi-weekly removal of floating product will continue.
- Drill soil borings and install onsite vapor extraction wells as outlined in the Addendum Three to Work Plan (RESNA, April, 1992).
- Perform vapor extraction test.

If you have any questions or comments regarding this letter, please call us at (408) 264-7723.

Sincerely,
RESNA Industries Inc.

Joel Coffman
Project Geologist

cc: Mr. Michael Whelan, ARCO Products Company

Applied GeoSystems, Inc.
A RESNA Company

RESNA
Working To Restore Nature

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
Fax: (408) 264-2435

July 24, 1992
0724BCHA.2035
61026.01

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94624

Subject: Site Status Update for ARCO Station 2035, 1001 San Pablo Avenue, Albany, California.

Dear Mr. Chan:

This letter provides an update on investigation and remedial activities conducted for the above-referenced site. This update covers site activities performed during June 1992, and site activities anticipated for the month of July 1992.

June 1992 Activities

- Performed bi-weekly product removal from well RW-1.
- Performed groundwater monitoring.

Work Anticipated for July 1992

- Continue monthly groundwater monitoring, and submit draft Second Quarter Monitoring Report to ARCO for review.
- Bi-weekly removal of floating product will continue.
- Initiate obtaining street encroachment permit to install three offsite groundwater monitoring wells.
- Upon approval, by Alameda County Health Care Services Agency, of the work plan (RESNA, May 28, 1992) for installation of vapor extraction wells, three

vapor wells will be installed, and a vapor extraction test will be performed at this site. Will proceed with permitting of wells and scheduling of well installation if work plan approval has not been granted within 60 days (by July 28, 1992) of work plan submittal date (May 28, 1992).

- Initiate contact with the City of Albany regarding permitting requirements for installation of an interim soil and groundwater remediation system.

If you have any questions or comments regarding this letter, please call us at (408) 264-7723.

Sincerely,
RESNA Industries

Joel Coffman
Project Geologist

cc: Mr. Michael Whelan, ARCO Products Company

ARCO Products Company
2000 Alameda de las Pulgas
Mailing Address: Box 5811
San Mateo, California 94402
Telephone 415 571 2400

92 JUL -6 PM 2:42

July 3, 1992

Mr. Richard Hiett
California Regional Water Quality Control Board
2101 Webster Street, Suite 500
Oakland, California 94612

Subject: Minutes of Meeting on June 11, 1992 at the Regional Water Quality Control Board (RWQCB) to discuss work progress at ARCO Stations which are under the jurisdiction of Mr. Richard Hiett of the RWQCB.

Mr. Hiett:

I would like to thank you and the people from the Alameda County Health Care Services Agency (ACHCSA) for agreeing to meet with ARCO and our consultants concerning ARCO sites within your regulatory jurisdiction located within Alameda County, California. This letter is our understanding of the status and schedules for the sites which were discussed. If you should notice any discrepancies from your understanding of the status or schedule of these sites noted, please notify ARCO. This letter is a brief overview of a meeting held at the RWQCB in Oakland, California at 2:00 pm on Thursday, June 11, 1992 concerning work progress and plans for future work at ARCO Stations in Alameda County, California which are currently under the regulatory jurisdiction of Mr. Richard Hiett of the RWQCB. Attending the meeting were Mr. Richard Hiett and Mr. Lester Feldman of the RWQCB; Ms. Susan Hugo, Mr. Scott Seery, Mr. Ed Howell, Ms. Juliet Shin, and Mr. Barney Chan of the Alameda County Health Care Services Agency (ACHCSA); Mr. Michael Whelan of ARCO Products Company (ARCO); Mr. John Vargas and Ms. Diane Lundquist of GeoStratagies Inc.; and, Ms. Valli Voruganti and Mr. Joel Coffman of RESNA Industries.

The meeting was held at the request of ARCO to introduce Mr. Michael Whelan as the acting environmental engineer overseeing ARCO sites in Alameda County, California and to provide the RWQCB and the ACHCSA a brief overview of work being performed at the subject sites.

An agenda for the meeting had previously been sent to Ms. Susan Hugo of the ACHCSA for distribution among the various caseworkers within her agency. The following is an overview of the agenda and items for discussion:

ARCO Station	Address & City
276	10600 MacArthur Blvd., Oakland
374	6407 Telegraph Ave., Oakland
414	3000 Shattuck Ave., Berkeley
2035	1001 San Pablo Ave., Albany
2107	3310 Park Blvd., Oakland
2152	22141 Center St., Castro Valley
2169	899 W. Grand Ave., Oakland
2185	9800 E. 14th St., Oakland
4494	566 Hegenberger Rd., Oakland
4931	731 W. MacArthur, Oakland
6041	7249 Village Parkway, Dublin
6148	5131 Shattuck Ave., Oakland

Topics for discussion to include:

- Permitting and Access Problems, including City of Oakland
- Anticipated Remediation Schedules
- Plan of Action to Complete Delineation of Site
- Possible/Probable Contributing Offsite Polluters, Help in gaining access/cooperation/information from them
- Quicker approval of addendums to work plans, may we proceed without approval in cases where additional monitoring wells are being added to a monitoring program?

The meeting convened at 2: 00 pm on June 11, 1992 and upon completion of introductions, Mr. Ed Howell indicated that the ACHCSA was the oversight agency for all of Alameda County with exception to the cities of Berkeley, San Leandro, Hayward, Fremont, Newark, Union City, and Pleasanton. The Alameda County Water District (ACWD) has oversight in Fremont, Newark, and Union City, California. Currently, the ACHCSA is negotiating with the cities of Berkeley and San Leandro to allow ACHCSA oversight of sites within their cities. Mr. Hiett explained that he was the RWQCB engineer for sites in Alameda County which include all sites with exception of the cities which regulate themselves (referenced above) and the city of Livermore. He explained that John Jang was the RWQCB engineer with responsibility for the self regulated cities of Berkeley and San Leandro and that Eddy So has responsibilities for the sites within the cities of Livermore and Hayward and the cities within the ACWD. Mr. Barney Chan of the ACHCSA is now in charge of overseeing sites for the ACHCSA which were previously under the direction of Mr. Paul Smith and Mr. Larry Seto of the ACHCSA. These sites include ARCO Stations 276 and 2107 in Oakland, California and ARCO Station 2035 in Albany, California.

Mr. Whelan explained that ARCO's general approach to investigation consists of multiple phases of work, often being performed simultaneously. To expedite the processes involved in delineating and remediating a site, ARCO often will gather results from a subsurface investigation, vapor extraction test, or aquifer test and pass the information to engineers so remedial system design can begin before formally finalizing the reports. To further expedite the process, ARCO requested for the ACHCSA to speed up their review of work plans and remedial action plans. Mr. Whelan also explained that often during tank removal and replacement activities, ARCO installs several types of piping in trenches across the site which can later be used in various types of remediation systems. This piping is designed to accommodate electrical and air lines for pumps, groundwater extraction and soil vapor extraction. This approach minimizes disruption at the site during future installation of various remediation systems.

Site specific items of discussion were as follows:

Station 276, 10600 Mac Arthur Blvd., Oakland, California

Mr. Chan raised several concerns related to Station 276 including a desire for the groundwater gradient of the shallow perched water-bearing zone at the site to be established and full delineation of hydrocarbon impacted soil and groundwater at the site. The halogenated volatile organic compounds (VOCs) found in groundwater at the site were also discussed and it was disclosed that ARCO would be installing offsite upgradient wells to determine an offsite source was responsible for VOCs found in groundwater at the site. It

was pointed out that during removal of the waste oil storage tank at the site, there was no evidence of waste oil contamination in soils surrounding the tank and no onsite source for the VOCs. It was also pointed out that the adjacent upgradient property had been an automobile manufacturing plant from circa 1920's to the late 1950's and that operations associated with those activities may be the source of the VOC problem in groundwater at the site.

ARCO stipulated that they do not want to start pumping and treating VOC impacted groundwater at the site until the source of the VOC contamination is identified and the upgradient extent of VOCs in soil and groundwater is delineated. ARCO does not want to clean up groundwater that was impacted by others. Pumping prior to resolution of these matters may actually pull more VOCs onto the site from a probable offsite source. The adjacent upgradient property is listed on the fuel leaks list as Foothill Square Shopping Center. Mr. Richard Gilcrease is the representative of the current property owner, Drake Builders, whom ARCO has been in contact with concerning installation of monitoring wells on the adjacent upgradient property. The last address known for correspondence with Drake Builders is: 5200 Panama Avenue, Richmond, California 94804. Mr. Lester Feldman stated that if the VOC problem is shown to originate from offsite that the RWQCB will pursue the responsible offsite parties for clean up.

The installation of onsite vapor extraction wells and their connection to an existing vapor extraction system at the site was also discussed. At least one of the onsite vapor extraction wells in the southwest corner of the site will be completed as a combination vapor extraction/groundwater monitoring well, if the shallow perched water-bearing zone is not encountered, to help delineate the onsite extent of hydrocarbon impacted groundwater and to provide better groundwater gradient information.

It was explained that ARCO's approach to remediation was to close the site down once and install all necessary and anticipated remediation piping. At this site, it was pointed out that tying into groundwater recovery well RW-1 doesn't imply that ARCO will or is required to remediate the groundwater since the VOCs there probably originate from an offsite source and gasoline hydrocarbons have not impacted groundwater in that portion of the site.

Station 374, 6407 Telegraph Ave., Oakland, California

Discussion about this site with Ms. Susan Hugo of the ACHCSA and Mr. Hiett of the RWQCB included mention of the fact that obtaining encroachment permits from the City of Oakland had been a lengthy, time consuming process which had taken some six months to complete. Mr. Hiett suggested getting names of personnel at the City of Oakland and

that maybe his agency could contact these people to speed up future encroachment permitting. Ms. Hugo was informed that two offsite and downgradient monitoring wells (MW-5 and MW-6) had recently been installed and that soils and groundwater from the borings/wells contained nondetectable levels of gasoline hydrocarbons. A technical report with all field results related to the installation of these offsite wells is being prepared by RESNA.

It was pointed out that a service station located across Telegraph Avenue to the east in the upgradient or cross gradient direction from ARCO Station 374 had been taken out of service during the mid 1980s and that there was a report documenting soil contamination from that site. There is no record in the files that an investigation to determine if groundwater beneath this former service station was impacted by hydrocarbons detected in the soils. This was of concern to ARCO as the onsite monitoring well MW-1, located cross gradient and relatively close to the source area (former tanks) has been consistently free of hydrocarbon impacted groundwater while the onsite monitoring well MW-2, located further from the source and in the upgradient direction from the source at the ARCO site has consistently contained hydrocarbon impacted groundwater. This leads ARCO to believe hydrocarbon impacted groundwater below this portion of the site may originate from the site across Telegraph Avenue to the east.

Ms. Hugo mentioned that an onsite groundwater monitoring well (MW-4) had once contained total petroleum hydrocarbons as diesel. Mr. Whelan pointed out that ARCO had never stored diesel at the site and that weathered gasoline would often show up as diesel on laboratory chromatograms.

In addition, Ms. Hugo gave verbal approval of the Remedial Action Plan for interim soil and groundwater remediation submitted by RESNA on behalf of ARCO.

Station 414, 3000 Shattuck Ave., Berkeley, California

As stated above, sites being discussed in this meeting were those under guidance of Mr. Hiett of the RWQCB. This site is currently under direction of Mr. Jang and therefore was passed over and not discussed in this meeting.

Station 2035, 1001 San Pablo Ave., Albany, California

Mr. Barney Chan of the ACHCSA recently assumed oversight responsibilities for this site from Mr. Larry Seto. He was not completely up to date with previous activities conducted at the site. It was mentioned that the tanks had been replaced during July and August of

1991 and that a subsurface investigation including an aquifer test had been completed at the site. Resna prepared technical reports on behalf of ARCO for the subsurface investigation and the tank replacement. It was also brought to Mr. Chan's attention that a work plan addendum had been prepared by RESNA and delivered to the ACHCSA during May 1992. Mr. Chan said he would review the work plan and get back to ARCO and RESNA with any comments he might have. As of the date of this letter, approval of this work plan addendum has not been received. Additional wells in the vicinity of the new tanks will be proposed under a separate phase of work.

Station 2107, 3310 Park Blvd., Oakland, California

Mr. Barney Chan of the ACHCSA recently assumed oversight responsibilities of this site from Mr. Paul Smith. He was not completely up to date with previous activities conducted at the site. Mr. Joel Coffman and Ms. Valli Voruganti of RESNA explained the proposed groundwater treatment system to be installed at the site along with installation of offsite monitoring wells to delineate the extent of hydrocarbons in groundwater beneath the site. Mr. Chan requested that groundwater from the wells be analyzed for total petroleum hydrocarbons as diesel (TPHd) as TPHd had previously been detected at the site. Mr. Whelan of ARCO explained that ARCO had never stored diesel at the site and that weathered gasoline often showed up on laboratory chromatograms as diesel. It was agreed that downgradient wells will be sampled one time to confirm that TPHd found in the soil was indeed weathered gasoline.

Station 2152, 22141 Center St., Castro Valley, California

Mr. Scott Seery of the ACHCSA was informed that the proposed soil borings (B-19 and B-20) had been drilled and all soil samples collected for analysis from the borings contained nondetectable concentrations of gasoline hydrocarbons, therefore, vapor extraction wells were not constructed in the borings. It was explained by RESNA that the groundwater has only shown trace amounts of hydrocarbon impact on two quarterly monitoring episodes, once each during the spring of 1990 and 1991. All wells have contained nondetectable concentrations of gasoline hydrocarbons since the spring of 1991. Mr. Seery made mention of the fact he had not received a copy of the report related to the soil borings. ARCO and RESNA told Mr. Seery that the report should be issued within 30 days.

It was noted that the Bay Area Air Quality Management District had issued a permit granting RESNA and ARCO the authority to construct a soil vapor extraction system at the site. Progress of obtaining other permits was also discussed.

Station 2169, 899 W. Grand Ave., Oakland, California

Mr. John Vargas discussed the site background for this site. Four monitoring wells and one groundwater extraction well were installed in March 1992 to assess the groundwater conditions at the site. The previous tanks were removed and relocated between February and May, 1992. This work was performed in response to petroleum hydrocarbons identified in a monitoring well adjacent to the previous tank complex. A report of these field activities is in progress and will be submitted to the ACHCSA in July, 1992. In addition, three vapor extraction wells and one groundwater extraction well, located in the new tank complex, were installed on June 8, 1992. A vapor extraction test was performed on June 11, 1992. A report documenting the results of the vapor extraction test and well installations is in preparation.

Ms. Susan Hugo queried how we chose the locations of these wells. Mr. Vargas explained that since petroleum hydrocarbons had impacted onsite groundwater, wells were located at the property boundaries in addition to a well within the previous tank complex. Since petroleum hydrocarbons were identified in an upgradient well, there may be offsite sources. Planned site activities include research for offsite sources, performance of an aquifer test and offsite assessment. Once aquifer characteristics are determined, ARCO will initiate design and permitting of a remediation system.

Station 2185, 9800 E. 14th St., Oakland, California

Mr. Barney Chan discussed how he wanted the subsurface investigation to proceed as he had previously discussed with Mr. Chuck Carmel of ARCO and Mr. Paul Supple of Roux Associates. It was explained that the site was still fenced off and under construction due to a problem encountered by the contractors that performed the tank removal and replacement. Mr. Chan also asked about the subsurface piping that was installed at the site to be used for future remediation. Mr. Whelan explained that piping for remediation purposes was scheduled to be installed at the site, but, due to problems associated with the subcontractor, the piping was not installed and will be installed during the construction phase of any remediation system which may need to built at the site. The tank replacement report was recently submitted to the ACHCSA by Roux Associates.

As documented in a previous letter written to Mr. Barney Chan, it was also discussed with Mr. Chan that ARCO wished to hold off the initiating of obtaining offsite access for installation of offsite monitoring wells at the site until onsite groundwater monitoring wells were installed and monitored to determine the gradient and direction of groundwater flow beneath the site.

Station 4494, 566 Hegenberger Rd., Oakland, California

Mr. Chan expressed concern that although ARCO had submitted a permit application for removal and replacement of the underground storage tanks at the site and that approval for tank replacement had been granted in November 1991, he has still not been given a firm schedule for the replacement of the tanks at the site. Mr. Whelan explained the different responsibilities of the various groups within ARCO and that the ARCO construction department was responsible for the tank replacement scheduling and that he was not involved. However, Mr. Whelan also pointed out that ARCO is in compliance with tank testing requirements and that results of tank and product line leak tests show the tanks and lines are not leaking. The site is on an ARCO tank replacement list, but, the schedule has not been finalized. ARCO will replace the tanks in accordance with deadlines and other requirements as set forth by applicable state guidelines.

It was disclosed that after almost a year of negotiation, an agreement had finally been reached with the adjacent property owner downgradient from the site for installation of offsite groundwater monitoring wells. This work is to be performed in July 1992 along with installation of an additional onsite monitoring well in the northwestern portion of the site.

Station 4931, 731 W. MacArthur, Oakland, California

Mr. John Vargas and Ms. Diane Lundquist discussed the progress at this site since the January 17, 1992 meeting held between ARCO and the ACHCSA. Floating product has been observed in wells A-4 and A-8. A product skimmer will address the floating product in well A-8 until the remedial system is installed. Well A-2, which is adjacent to the former tank complex, was analyzed for oil and grease and lead. These constituents were not identified. The offsite upgradient well and onsite recovery wells were scheduled to be drilled June 12 and 15, 1992. A well located crossgradient to the east of the site is not feasible to install due to access problems.

The tank replacement and relocation project is still in progress. Additional soils were removed from the previous tank complex as requested by the ACHCSA in the January 1992 meeting. Some impacted soil, containing less than 151 parts-per-million hydrocarbons, was left in place due to site constraints (ARCO's facility building and pump islands) which limited the extent of the excavation. A vapor extraction test indicated that vapor extraction is not a feasible option to remediate these areas.

Permits for construction of the remediation system for groundwater discharge have been obtained. The remediation system trenching and construction was scheduled to begin in mid

to late June, 1992. Start-up of the remedial system is scheduled for the third quarter of 1992.

Station 6041, 7249 Village Parkway, Dublin, California

RESNA explained to Mr. Scott Seery that there is a Unocal Station across the street directly west of the ARCO site which has reported significantly higher concentrations of hydrocarbon impacted groundwater. This was pointed out for informational purposes only as RESNA, on behalf of ARCO, is preparing a work plan with proposed work which includes installation of additional monitoring wells, installation of vapor extraction wells, a performance of a vapor extraction test, installation of a groundwater recovery well, and performance of an aquifer pumping and recovery test. This work plan will be submitted to ARCO and the proper regulatory agencies upon completion in July 1992.

Station 6148, 5131 Shattuck Ave., Oakland, California

Ms. Hugo stated she had not received the subsurface investigation report associated with the waste oil investigation at the site. Mr. Whelan explained that ARCO is currently reviewing all the analytical data associated with the investigation and that the report will be issued shortly. ARCO is awaiting backup from the laboratory to complete the review of the analytical data. It was also stated a work plan with proposed additional work at the site is being prepared by RESNA for submittal to ARCO and the proper regulatory agencies in July 1992.

Other Topics for discussion:

- **Permitting and Access Problems, including City of Oakland**

Mr. Hiett asked that if problems are encountered gaining encroachment permits, he be given the names of people at the city in charge of issuing the permits so he may phone them and help expedite the process.

- **Anticipated Remediation Schedules**

ACHCSA asked that any delays which slow down the remediation of sites beyond the schedules which were submitted to the Alameda County District Attorney be carefully documented.

- **Plan of Action to Complete Delineation of Site**

Mr. Whelan explained to the RWQCB and ACHCSA that ARCO is aggressively attempting to fully delineate the onsite and offsite extents of any problems associated with these sites.

- **Possible/Probable Contributing Offsite Polluters, Help in gaining access/cooperation/information from them**

This topic was discussed while reviewing the status of each site.

- **Quicker approval of addendums to work plans, may we proceed without approval in cases where additional monitoring wells are being added to a monitoring program?**

In addressing the request from ARCO for quicker approval of work plans and addendums to work plans, Mr. Chan pointed out that a responsible party does not have to wait for approval of any kind to implement interim remedial measures at a site.

A brief discussion was held about the law under Title 23, Article 11, Chapter 16, Sections 2722 (b)(5) and 2726 (c)(1), which allows for proceeding with proposed work in work plans if not having received approval after 60 days from submittal. Mr. Whelan asked that ARCO be allowed to proceed with proposed work in work plans if the scope of work was the addition of monitoring wells or other work not associated specifically with complex remediation alternatives. Mr. Whelan pointed out that many times in the past work had been significantly delayed due to the time required to obtain work plan approval from the ACHCSA. Mr. Scott Seery asked that ARCO send a note to the ACHCSA requesting work plan review if approval had not been granted when ARCO and it's consultant are ready to implement work or after 45 days from work plan submittal date. This note, with attached figure of proposed well locations, should state that proposed work will proceed if approval has not been granted within the 60 day guideline.

Upon completion of this discussion, the meeting was adjourned at approximately 5:10 pm.

Mr. Richard Hiett
July 3, 1992

If you have any questions or comments about these meeting minutes, please contact me at (415) 571-2449.

Sincerely,

Michael R. Whelan
Environmental Engineer

cc: Lester Feldman, RWQCB
Susan Hugo, ACHCSA
Chris Winsor, ARCO
John Meck, ARCO
John Vargas, GeoStratagies
Joel Coffman, RESNA Industries

Applied GeoSystems, Inc.
A RESNA Company

RESNA
Working To Restore Nature

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
Fax: (408) 264-2435

92 SEP 25 AM 8:47

September 23, 1992
0923shgo

Ms. Susan Hugo
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94612

Subject: Proposed Agenda for Meeting at your office on September 30, 1992.

Dear Ms. Hugo:

We have prepared this proposed agenda for the meeting we have scheduled at your office on September 30, 1992. This meeting will be for discussion of sites under direction of Mr. Richard Hiett and Mr. John Jang of the Regional Water Quality Control Board (RWQCB). We understand these RWQCB personnel may not be able to attend the entire meetings but may be able to stop by for site specific discussions. A separate meeting to discuss sites overseen by Mr. Eddie So of the RWQCB will have to be scheduled at another date as he has other agencies involved with many of his sites.

Items we would like to discuss include the following: ongoing assessment at the sites, offsite access problems and possible offsite contributing polluters, schedules for remediation, and other issues as they arise in discussing the sites. If you have any questions or comments concerning this proposed agenda, please call us at (408) 264-7723.

Sincerely,
RESNA Industries, Inc.

Joel Coffman
Project Geologist

cc: Michael Whelan, ARCO Products Company
John Jang, RWQCB
Richard Hiett, RWQCB
John Vargas, GeoStrategies

September 21, 1992

Proposed Agenda for September 30, 1992 ACHCSA Meeting

	ARCO Station	ACHCSA Staff	RWQCB Staff	Cnsltnt
	# 276, 10600 MacArthur Blvd.	Barney Chan	Richard Hiett	RESNA
	# 2035, 1001 San Pablo, Albany	Barney Chan	Richard Hiett	RESNA
00 - 10:30	# 2107, 3310 Park Blvd.	Barney Chan	Richard Hiett	RESNA
	# 2185, 9800 E. 14th St.	Barney Chan	Richard Hiett	RESNA
	# 4494, 566 Hegenberger Rd.	Barney Chan	Richard Hiett	RESNA
	# 374, 6407 Telegraph Ave.	Susan Hugo	Richard Hiett	RESNA
	# 2112, 1260 Park St., Alameda	Susan Hugo	Richard Hiett	G/Ryan
30 - 12:00	# 2169, 899 W. Grand Ave.	Susan Hugo	Richard Hiett	G/Ryan
	# 4931, 731 W. MacArthur	Susan Hugo	Richard Hiett	G/Ryan
	# 6148, 5131 Shattuck Ave.	Susan Hugo	Richard Hiett	RESNA
	# 6041, 7249 Village Pkwy, Dublin	Scott Seery	Richard Hiett	RESNA
	# 2152, 22141 Ctr. St., Castro Valley	Scott Seery	Richard Hiett	RESNA
1:00 - 3:00	# 601, 712 Lewelling Bd., San Leandro	Scott Seery	John Jang	RESNA

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3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
Fax: (408) 264-2435

June 18, 1992
0618BCHA.203
61026.01

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94624

Subject: Site Status Update for ARCO Station 2035, 1001 San Pablo Avenue, Albany, California.

Dear Mr. Chan:

This letter provides an update on investigation and remedial activities conducted for the above-referenced site. This update covers site activities performed during May 1992, and site activities anticipated for the month of June 1992.

May 1992 Activities

- Performed bi-weekly product removal from well RW-1.
- Performed groundwater monitoring.
- Submitted First Quarter 1992 Quarterly Groundwater Monitoring Report to ARCO and governing regulatory agencies.

Work Anticipated for June 1992

- Monthly groundwater monitoring will continue.
- Bi-weekly removal of floating product will continue.
- Submit work plan for additional assessment including installation of offsite groundwater monitoring wells, onsite vapor extraction wells and performance of a vapor extraction test to ARCO.

If you have any questions or comments regarding this letter, please call us at (408) 264-7723.

Sincerely,
RESNA Industries

Joel Coffman
Project Geologist

cc: Mr. Michael Whelan, ARCO Products Company

RESNA

6/11/92

1260 Park St. Alameda

File - arco meeting 6/11/92

Sites to be discussed during meeting at RWQCB on June 11, 1992

ARCO Station	Address & City
276	10600 Mac Arthur Blvd., Oakland ← VOC problems 2 up gradient wells
374	6407 Telegraph Ave., Oakland → July 1992 (late) System in place 6 MWs - 4 VWs - SW direction
414	3000 Shattuck Ave., Berkeley
2035	1001 San Pablo Ave., Albany ✓
2107	3310 Park Blvd., Oakland
2152	22141 Center St., Castro Valley
2169	899 W. Grand Ave., Oakland — John Vargo / Leone Lindquist
2185	9800 E. 14th St., Oakland
4494	566 Hegenberger Rd., Oakland
4931	731 W. MacArthur, Oakland →
6041	7249 Village Parkway, Dublin
6148	5131 Shattuck Ave., Oakland → 3 MW's + 1 Boring (SW →) 5275 Washington Livelling Blvd.

Topics for discussion to include:

- ✓ Permitting and Access Problems, including City of Oakland - Name of people signing permit.
- delays w/ → Anticipated Remediation Schedules → on schedule or ahead of schedule
- next phase of work → Plan of Action to Complete Delineation of Site
- Joint remediation → Possible/Probable Contributing Offsite Polluters, Help in gaining access/cooperation/information from them
- EBMUD discharge permit → $12,000 RWQCB discharge waste permit

Quicker approval of addendums to work plans, may we proceed without approval in cases where additional monitoring wells are being added to a monitoring program? drilling schedule then flag Rennie to flag

Interim Schedule for Corrective Action

(6/11/92) **LIST OF ARCO SITES WITH UGT CLEANUP**

STID#	ACHD CONTACT	ARCO FACILITY#	ADDRESS
3629	Susan Hugo	Station 2112	1260 Park Street Alameda 94501
817	Juliet Shin	Station 5387	20200 Hesperian Blvd. Hayward 94541
3943	Scott Seery	Station 2152	22141 Center Street Castro Valley 94546
3883	Susan Hugo	Station 6113	785 E. Stanley Blvd. Livermore 94550
3873	Susan Hugo	Station 771	899 Rincon Avenue Livermore 94550
1053	Scott Seery	Station 6041	7249 Village Parkway Dublin 94568
779	Juliet Shin	Station 608	17601 Hesperian Blvd. San Lorenzo 94580
3876	Barney Chan	Station 2185	9800 East 14th Street Oakland 94603
3756	Barney Chan	Station 276	10600 MacArthur Blvd. Oakland 94605
3874	Susan Hugo	Station 4931	731 W. MacArthur Blvd. Oakland 94609
3884	Susan Hugo	Station 374	6407 Telegraph Avenue Oakland 94609
3626	Susan Hugo	Station 6148	5131 Shattuck Avenue Oakland 94609
3890	Barney Chan	Station 2107	3310 Park Blvd. Oakland 94610
3854	Barney Chan	Station 4494	566 Hegenberger Road Oakland 94621
3793	Susan Hugo	Station 2169	889 W. Grand Ave. Oakland 94607
3858	Barney Chan	Station 2035	1001 San Pablo Avenue Albany 94706
0000	Scott Seery	Station 601	712 Lewelling Blvd. San Leandro 94579

Sign-up Sheet
ARCO Meeting June 11, 1992
at RWQCB

Name	Co.	Phone #
Susan L. Hugo	Alameda Co.	271-4530
Edgar Howell	"	(510) 271-4320
Joel Coffman	RESNA/San Jose	(408) 264-7723
[illegible]	Geo Strategies	(510) 352-4800
R. [illegible]	RWQCB	(510) 464-4359
Lester Feldman	RWQCB	(510) 464-1332
Scott Seery	ACDEH	510/ 271-4530
Barney Chan	ACDEH	(510) 271-4530
Juliet Shin	ACDEH	"
John Vargas	GeoStrategies	(510) 352-4800
Mike Whelan	ARCO	(415) 571-2449
Valli Voruganti	RESNA/San Jose	(408) 2647723

VOC's in groundwater need PBR

6/11/92 Arco Meeting -
with Michael Wheland - arco

#1 10600 MacArthur Blvd. Oakland (Shopping Center)
- PCE/TCE
VOC problems (heavy)
to install 2 upgradient wells
land use - dry cleaners in the area
* Letter to property owner to cooperate

2 MWs installed at deeper aquifer
2 aquifers (Shallow / deeper aquifer)
→ VOC

Lithologic - sampling -
once VOC

- #374

Ground H2O problem

Encroachment 3-6 mos.
permit with City of Oakland

Permits { BAAQMD, EBMUD
City Fire
City Building
Encroach. some permits from City Oakland

✓ #2035 1001 San Pablo Ave. Albany - 6 to 9 months

Weekly bailing of FP

Pump & treat to control the plume

Multi phases of simultaneously (approach by Arco)
Arco not allowed to wait for engineered design
... they will implement system to control migration off.

Goal - to get the system in as soon as possible

✓ #3310 Park Blvd
Same as Telegraph 6407
→ late July 1992. System's in
B-11 → TPHd, TOG

Piping layout - Submit

#218

—

STID #

CERTIFIED MAIL

Applied GeoSystems, Inc.
A RESNA Company

RESNA
Working To Restore Nature

92 JUN -2 PM 12:24

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
Fax: (408) 264-2435

TRANSMITTAL

TO: MR. LARRY SETO
ACHCSA-DEH
80 SWAN WAY, ROOM 200
OAKLAND, CALIFORNIA 94621

DATE: 5/29/92
PROJECT NUMBER: 69036.05
SUBJECT: ARCO STATION 2035 AT 1001 SAN PABLO AVENUE IN ALBANY, CA

FROM: ROBERT CAMPBELL
TITLE: STAFF GEOLOGIST

WE ARE SENDING YOU [XX] Attached [ ] Under separate cover via _____ the following items:

[ ] Shop drawings [ ] Prints [ ] Reports [ ] Specifications

[ ] Letters [ ] Change Orders [ ] _____

COPIES	DATED	NO.	DESCRIPTION
1	5/29/92		FINAL-ADDENDUM THREE TO WORK PLAN ON SUBSURFACE INVESTIGATION AND REMEDIATION AT THE ABOVE SUBJECT SITE.

THESE ARE TRANSMITTED as checked below:

[ ] For review and comment [ ] Approved as submitted [ ] Resubmit ___ copies for approval

[ ] As requested [ ] Approved as noted [ ] Submit___ copies for distribution

[ ] For approval [ ] Return for corrections [ ] Return ___ corrected prints

[ ] For your files [ ] _____

REMARKS: THIS ADDENDUM THREE HAS BEEN FORWARDED TO YOU AT THE REQUEST OF MR. MICHAEL WHELAN OF ARCO PRODUCTS COMPANY.

Copies: 1 to project file no. 69036.05

*Revision Date: 11/21/91
*File Name: TRANSMT.PRJ

Applied GeoSystems, Inc.
A RESNA Company

RESNA
Working To Restore Nature

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
Fax: (408) 264-2435

May 22, 1992
0505LSET.203
61026.01

Mr. Larry Seto
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94624

Subject: Site Status Update for ARCO Station 2035, 1001 San Pablo Avenue, Albany, California.

Dear Mr. Seto:

This letter provides an update on investigation and remedial activities conducted for the above-referenced site. This update covers site activities performed during April 1992, and site activities anticipated for the month of May 1992.

April 1992 Activities

- Performed bi-weekly product removal from well RW-1.
- Performed groundwater monitoring.

Work Anticipated for May 1992

- Monthly groundwater monitoring will continue.
- Bi-weekly removal of floating product will continue.
- Submit draft work plan for additional assessment including installation of offsite groundwater monitoring wells, onsite vapor extraction wells and performance of a vapor extraction test to ARCO.

If you have any questions or comments regarding this letter, please call us at (408) 264-7723.

Sincerely,
RESNA Industries

Robert D. Campbell
Staff Geologist

Joel Coffman
Project Geologist

cc: Mr. Michael Whelan, ARCO Products Company

CERTIFIED MAIL

Applied GeoSystems, Inc.
A RESNA Company

RESNA
Working To Restore Nature

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
Fax: (408) 264-2435

92 MAY 28 PM 1:11

TRANSMITTAL

TO: MR. LARRY SETO
ACHCSA-DEH
80 SWAN WAY, ROOM 200
OAKLAND, CALIFORNIA 94621

DATE: 5/28/92
PROJECT NUMBER: 61026.01
SUBJECT: ARCO STATION 2035 IN ALBANY AND ARCO STATION 601 IN SAN LEANDRO, CA.

FROM: ROBERT CAMPBELL
TITLE: STAFF GEOLOGIST

WE ARE SENDING YOU [X] Attached [ ] Under separate cover via _____ the following items:

[ ] Shop drawings [ ] Prints [ ] Reports [ ] Specifications

[ ] Letters [ ] Change Orders [ ] _____

COPIES	DATED	NO.	DESCRIPTION
1 EA	5/22/92		SITE STATUS UPDATES FOR THE ABOVE SUBJECT SITES.

THESE ARE TRANSMITTED as checked below:

[ ] For review and comment [ ] Approved as submitted [ ] Resubmit ___ copies for approval

[ ] As requested [ ] Approved as noted [ ] Submit___ copies for distribution

[ ] For approval [ ] Return for corrections [ ] Return ___ corrected prints

[ ] For your files [ ] _____

REMARKS: CC: MICHAEL WHELAN, ARCO PRODUCTS COMPANY

Copies: 1 to project file no. 61026.01

*Revision Date: 11/21/91
*File Name: TRANSMT.PRJ

RP: Turpin Muriel D. & Lastrange Hattie A. & James A
957 Arlington Ave. Berkeley 94707

ARCO Petroleum Products Co.
Mr. Michael Whelan
P.O. Box 5811
San Mateo, CA 94402

DATE: 4/24/92

TO : Local Oversight Program

FROM: SUSAN

SUBJ: Transfer of Elligible Oversight Case

Tank operator: Rahman Farsi

Site name: ARCO

Address: 1001 San Pablo Ave. City Albany Zip 94706

Closure plan attached? (Y) N DepRef remaining $_____

DepRef Project #_____ STID #(if any) 3858

Number of Tanks: 4 removed? (Y) N Date of removal 8/3/91

Samples received? (Y) N Contamination: Soil / groundwater FP

Petroleum (Y) N Types: Avgas Jet (leaded) (unleaded) Diesel
fuel oil waste oil kerosene solvents

Monitoring wells on site 4 Monitoring schedule? (Y) N Date of Discovery 8/25/89

LUFT category 1 2 (3) *(H) (S) (C) (A) R (W) G O

Briefly describe the following:

Preliminary Assessment 7/1/91 - Installed 3 MWs & 1 RW

Remedial Action Bailing of Free Product

Post Remedial Action Monitoring _____

Enforcement Action _____

RR#3

HAZARDOUS MATERIALS — ALAMEDA COUNTY

Site Brief for UNDERGROUND TANKS

for the City of Alameda — as of 04/23/92

Status	UTID/ BillID	Name of Site		Site Address	#Tanks	PERMITS:
		(SS). FP ✓		7R Lewelling Blvd. S.L.		
	3629 C	Arco Station #02112	FP ✓	1260 Park St.	4	I:12/27/91
	T61043			Alameda , CA 94501		F:01/23/92
	3858 C	Arco AM/PM Minimarket	FP #0 ✓	1001 San Pablo Ave.	4	I:-0-
	T61043			Albany , CA 94706		F:-0-
	658 C	Arco Station #04977		2770 Castro Valley Blvd.	3	I:09/06/88
	T61043			Castro Valley , CA 94546		F:-0-
	3943 C	Arco Station #02152		22141 Center St.	3	I:09/06/88
	T61043			Castro Valley , CA 94546		F:-0-
	1053 C	Arco Station #06041		7249 Village Pkwy.	3	I:09/06/88
	T61043			Dublin , CA 94568		F:-0-
	817 C	Arco Station #05387	FP ✓	20200 Hesperian Blvd.	4	I:09/06/88
	T61043			Hayward , CA 94541		F:-0-
	2112 C	Springtown Arco		909 Bluebell Dr.	3	I:-0-
	T42311			Livermore , CA 94550		F:-0-
	3941 C	Arco Facility #00498		286 S. Livermore Ave.	3	I:09/06/88
	T61043			Livermore , CA 94550		F:-0-
	3873 C	Arco Station #00771	FP ✓	899 Rincon Ave.	4	I:09/06/88
	T61043			Livermore , CA 94550		F:-0-
	-0- C	Arco Station #06113		785 E. Stanley Blvd.	3	I:09/06/88
	T61043			Livermore , CA 94550		F:-0-
	198 R	Wong's Arco		2032 E. - 12th St.	0	I:-0-
	T61026			Oakland , CA 94606		F:-0-
	3876 C	Arco Station #02185		9800 E. - 14th St.	4	I:09/06/88
	T61043			Oakland , CA 94603		F:-0-
	1130 C	Freeway Arco		2740 - 98th Ave.	4	I:10/13/87
	TA1036			Oakland , CA 94605 Arco?		F:-0-
	3793 C	Arco Station #02169	(SH) ✓	889 W. Grand Ave.	4	I:-0-
	T61043			Oakland , CA 94607		F:-0-
	3749 R	Gin's Arco Service		706 Harrison St. Arco?	0	I:-0-
	-0-			Oakland , CA 94612		F:-0-
	3854 C	Arco Station #04494	FP ✓	566 Hegenberger Rd.	3	I:02/05/88
	T61043			Oakland , CA 94621		F:01/30/91
	1038 C	Zema Ctr. Inc. Arco		2951 High St. Arco?	5	I:02/05/88
	T21043			Oakland , CA 94619		F:-0-
	3874 C	Arco Station #04931	FP ✓	731 W. MacArthur Blvd.	4	I:-0-
	T61043			Oakland , CA 94609		F:-0-
	3756 C	Arco Station #00276	FP ✓	10600 MacArthur Blvd.	4	I:-0-
	T61043			Oakland , CA 94605		F:-0-
	851 C	Mountain Blvd. Arco #796		2844 Mountain Blvd.	4	I:04/14/88
	T41043			Oakland , CA 94602		F:-0-
	-0- C	Arco Station #02107		3310 Park Blvd.	3	I:09/06/88
	T61043			Oakland , CA 94610		F:-0-
	3942 C	Arco Station #06002		6235 Seminary Ave.	4	I:09/06/88
	T61043			Oakland , CA 94605		F:07/30/91
	3626 C	Arco Station #06148		5131 Shattuck Ave.	3	I:09/06/88
	T61043			Oakland , CA 94609		F:-0-
	-0- C	Arco Station #00374	FP ✓	6407 Telegraph Ave.	3	I:09/06/88
	T61043			Oakland , CA 94609		F:-0-
	-0- F	freedom arco mini mart		15101 Freedom Ave. Arco?	3	I:-0-
	-0-			San Leandro , CA 94578		F:-0-
	1794 C	Tharco		2222 Grant Ave. Arco?	1	I:08/16/88
	T81053			San Lorenzo , CA 94580		F:-0-
	779 C	Arco Station #00608	FP	17601 Hesperian Blvd. ✓	4	I:09/06/88
	T61043		#779	San Lorenzo , CA 94580		F:12/31/91

PE ✓ REMEDIATION : FP ✓ 20200 Hesperian Blvd. ✓ B/M. 5yr permit

Applied GeoSystems, Inc.
A RESNA Company

RESNA
Working To Restore Nature

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
Fax: (408) 264-2435

April 14, 1992
0407LSET.203
61026.01

Mr. Larry Seto
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94624

SHD# 3855

Subject: Site Status Update for ARCO Station 2035, 1001 San Pablo Avenue, Albany, California. 94706

Dear Mr. Seto:

This letter provides an update on investigation and remedial activities conducted for the above-referenced site. This update covers site activities performed during March 1992, and site activities anticipated for the month of April 1992.

March 1992 Activities

- Submitted Subsurface Environmental Investigation and Pump Test Report to ARCO and regulatory agencies.
- Performed monthly product removal from well RW-1.
- Performed quarterly groundwater sampling and monitoring.

Work Anticipated for April 1992

- Monthly groundwater monitoring will continue.
- Monthly removal of floating product will continue.
- Initiate work plan preparation for additional assessment including installation of offsite groundwater monitoring wells, onsite vapor extraction wells and performance of a vapor extraction test.

If you have any questions or comments regarding this letter, please call us at (408) 264-7723.

Sincerely,
RESNA Industries

Robert D. Campbell
Staff Geologist

Joel Coffman
Project Geologist

cc: Mr. Michael Whelan, ARCO Products Company

RESNA

4/23/92
Called Don Moore (Stacor)
received OK updates of Arcs.

April 13, 1992

92 APR 14 PM 3:00

Ms. Susan Hugo
Alameda County Department of Environmental Health
80 Swan Way
Oakland, California 94621

ARCO Products Company Facilities in Alameda County

Dear Ms. Hugo:

Please find attached, Quarterly Summary Reports (QSRs) for ARCO Products Company Service Stations in Alameda County. The QSRs summarize activities conducted by ARCO at the respective sites during the first quarter of 1992; also included are projected site activities for the second quarter of 1992 and a bibliography of reports submitted for each location.

The QSRs are classified by city and address within Alameda County. We are submitting this document and attached QSRs as agreed. Please note that we are forwarding copies of the QSRs to the Regional Water Quality Control Board (RWQCB).

Please note that ARCO Products Company has reviewed the RWQCB's February 19, 1991 printout of ARCO fuel leak sites. We have evaluated each site with respect to ARCO's responsibility for investigation, monitoring, and/or remediation. Those locations for which ARCO is not responsible were listed and described in the QSR package delivered to you on July 15, 1991. The attached QSRs therefore represent only those locations for which ARCO is responsible.

ARCO is planning a subsequent comprehensive QSR submittal for ARCO sites on July 15, 1992. Please do not hesitate to contact us with any questions regarding this submittal.

Sincerely yours,

Daniel W. Moore for

Kyle A. Christie
Environmental Engineer

Attachments: ARCO Facility QSRs

A:\arcoqsrs\consmrg.ltr
50013-004-06

UST LEAK SITE UPDATE

Date of Last Review/Update: January 6, 1992

Current Date: April 6, 1992

SITE IDENTIFICATION

Name: ARCO Service Station 2035

Case No.:

Address: 1001 San Pablo Avenue
Street Number / Street

Albany
City

94706
ZIP Code

County: Alameda

Substance: Gasoline

Local Agency: Alameda County Health Care Services Agency

Regional Board: Regional Water Quality Control Board - San Francisco Bay Area

LEAD STAFF PERSON

ACHCSA - Mary Seto

CASE TYPE

____	Undetermined	____	Soil Only	X	Ground Water	____	Drinking Water

STATUS (Date indicates when case moved into status)

____	No Action Taken		
X	Leak Being Confirmed	Date	1/90
X	Preliminary Site Assessment Workplan Submitted	Date	4/29/91
X	Preliminary Site Assessment Underway	Date	7/1/91
X	Pollution Characterization	Date	10/91
X	Remediation Plan	Date	11/91
____	Remedial Action Underway	Date	
____	Post Remedial Action Monitoring	Date	
____	Case Referred to Regional Board	Date	
____	Case Referred to Dept. of Health Services	Date	
____	Case Closed	Date	

COMMENTS/MILESTONES:

USTs and product lines replaced in August - September 1991; impacted backfill excavated and aerated onsite. Treated soil removed to landfill. Installed three 4-inch diameter groundwater monitoring wells and one 6-inch diameter groundwater monitoring well. Performed aquifer pump test in November 1991.

RECENT ACTIVITIES/FINDINGS:

Last Quarter Activities: October through December 31, 1991, three monitoring wells and one recovery well were installed and a pump test was performed at the site. Submitted a Subsurface Environmental Investigation and Pump Test report on 3/6/92.

Current Quarter Activities: Bail product from RW-1.

ANTICIPATED ACTIVITIES:

Next Quarter Activities: Prepare Work Plan for next phase of work.

Continue Quarterly Monitoring

Reports documenting the site's history are listed on page 2.

REPORT	DATE	CONSULTANT
Subsurface Environmental Investigation and Pump Test 69036.02	3/6/92	RESNA
Addendum Two to Work Plan	9/24/91	RESNA
Underground Gasoline-Storage Tank Removal and Replacement 69036.03	9/11/91	RESNA
Work Plan for Subsurface Investigation and Remediation and Addendum One to Work Plan (AGS 69036-2).	4/29/91	RESNA/Applied GeoSystems
Limited Environmental Site Assessment AGS 69036-1	1/24/90	Applied GeoSystems

DATE: 4/9/92

TO : Local Oversight Program

FROM: Esa

SUBJ: Transfer of Elligible Oversight Case

Site name: ARCO # 2035

Address: 1001 San ~~Ramon~~ Pablo Av City Albany Zip 94706

Closure plan attached? Y N DepRef remaining $_____

DepRef Project # 5013 STID #(if any) 3858

Number of Tanks: 4 removed? (Y) N Date of removal July 31, 1991

Leak Report filed? Y N Date of Discovery July 31, 1991

Samples received? (Y) N Contamination: Soil, water

Petroleum (Y) N Types: Avgas Jet (leaded) (unleaded) Diesel
fuel oil (waste oil) kerosene solvents

Monitoring wells on site 4 Monitoring schedule? Y N

LUFT category 1 2 (3) * H S C A R (W) G O

Briefly describe the following:

Preliminary Assessment P.A. began Oct 14, 1991 - Soil borings, MW, Recovery well

Remedial Action Propose to install 3 VE wells

Post Remedial Action Monitoring _____

Enforcement Action _____

One Recovery well + 3 MWs installed

Floating product in MW - still in Jan 29, 1992

MW. up to 620 ppb TPHg ; 76 ppb benzene (March 1991)

GW at 17-20 ft BGS

Soil contam up to 2,400 ppm TPHG at 10' BGS

Applied GeoSystems, Inc.
A RESNA Company

RESNA
Working To Restore Nature

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
Fax: (408) 264-2435

March 16, 1992
0309LSET.203
61026.01

Mr. Larry Seto
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94624

Subject: Site Status Update for ARCO Station 2035, 1001 San Pablo Avenue, Albany, California.

Dear Mr. Seto:

This letter provides an update on investigation and remedial activities conducted for the above-referenced site. This update covers site activities performed during February 1992, and site activities anticipated for the month of March 1992.

Status of Previous Months Activities:

February 6, 1992: Submitted a Draft Subsurface Environmental Investigation and Pump Test Report to ARCO for review.

February 28, 1992: Bailed floating product from well RW-1.

Anticipated Work to be performed in the Next Month:

- Submit a final report to ARCO and governing regulatory agencies detailing the results of the subsurface investigation and pump and recovery tests, performed under Addendum Three to Work Plan.
- Monthly groundwater monitoring.
- Monthly removal of floating product.

- Submittal of a proposal for off and onsite subsurface investigations and remediation to ARCO for review and approval.

If you have any questions or comments regarding this letter, please call us at (408) 264-7723.

Sincerely,
RESNA

Robert D. Campbell
Staff Geologist

Joel Coffman
Project Geologist

cc: Mr. Chuck Carmel, ARCO Products Company

via certified mail

Applied GeoSystems, Inc.
A RESNA Company

RESNA
Working To Restore Nature

91 SEP 17 PM 1:15

TRANSMITTAL

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
Fax: (408) 264-2435

TO: MR. LARRY SETO
ALAMEDA COUNTY HEALTH CARE
SERVICES DEPARTMENT-HAZARDOUS MAT.
80 SWAN WAY, ROOM 200
OAKLAND, CALIFORNIA 94621

DATE: 9/12/91
PROJECT NUMBER: 69036.03
SUBJECT: ARCO STATION 2035, LOCATED AT 1001 SAN PABLO AVENUE, ALBANY, CA

FROM: STEVE STRAUSZ
TITLE: ASSISTANT PROJECT GEOLOGIST

WE ARE SENDING YOU [XX] Attached [ ] Under separate cover via _____ the following items:

[ ] Shop drawings [ ] Prints [XX] Reports [ ] Specifications

[ ] Letters [ ] Change Orders [ ] _____

COPIES	DATED	NO.	DESCRIPTION
1	9/11/91	69036.03	FINAL-UNDERGROUND GASOLINE-STORAGE TANK REMOVAL AND REPLACEMENT AT THE ABOVE SUBJECT SITE.

THESE ARE TRANSMITTED as checked below:

[ ] For review and comment [ ] Approved as submitted [ ] Resubmit ___ copies for approval

[ ] As requested [ ] Approved as noted [ ] Submit___ copies for distribution

[ ] For approval [ ] Return for corrections [ ] Return ___ corrected prints

[XX] For your files [ ] _____

REMARKS: THIS REPORT HAS BEEN FORWARDED TO YOU AT THE REQUEST OF MR. CHUCK CARMEL OF ARCO PRODUCTS COMPANY.

Copies: 1 to AGS project file no. 69036.03

SAN JOSE READER'S FILE

*Revision Date: 10/15/90
*File Name: TRANSMT.PRJ

SS:la

R0100

ARCO Products Company,
a division of AtlanticRichfieldCompany

FACILITY NO. 2035

AMENDMENT TO LESSEE PMPA FRANCHISE AGREEMENT/DEALER/PREMISES LEASE OPERATION OF UNDERGROUND STORAGE TANKS

CALIFORNIA

This Amendment, dated Feb. 20, 1992, is attached to, incorporated in and made a part of the Lessee PMPA Franchise Agreement/Dealer/Premises Lease ("PMPA Agreement"), in effect as of the date of this Amendment or, if applicable, to become effective concurrently with this Amendment, between Atlantic Richfield Company, a Delaware Corporation, through its division ARCO Products Company, ("Franchisor") and RAHMAN FARSI/MAJID GHANADAN ("Franchisee"), covering premises located at 1001 SAN PABLO AVE, ALBANY, CA 94706.

In return for good and valuable consideration, each party's receipt of which is hereby acknowledged, the parties agree as follows:

1. The parties have entered into this Amendment in accordance with legal requirements imposed on Franchisor and Franchisee concerning operation of the underground storage tanks at the above-referenced location.

2. Franchisor has provided Franchisee a copy of:

(a) California Health and Safety Code Section 25299 or an approved summary concerning civil and criminal penalties for violating terms of any permit to operate these underground storage tanks and relevant statutory and regulatory requirements.

(b) the following listed documents, a copy of which is attached and initialed by Franchisee:

Monitor & Response Plan-X w/Attachments

3. Where Franchisor has provided Franchisee with a copy of the permit to operate the underground storage tanks, Franchisee has read and understood it's responsibilities as operator under the permit and agrees to comply with each of the provisions of the permit. Irrespective of whether Franchisee has received and reviewed a copy of the underground storage tank operating permit, Franchisee hereby expressly agrees to do the following:

(a) monitor the underground tanks as required by law;

(b) maintain all required records and make such records available to the federal, state and local government agencies and to Franchisor at all reasonable times;

(c) follow all reporting procedures as required by law;

(d) mail, when submitted, to Franchisor, at the address specified in paragraph 1 of the PMPA Franchise Agreement/Dealer/Premises Lease, a copy of all reports submitted to government agencies;

(e) follow all operating procedures specified by Franchisor;

(f) immediately report to Franchisor all suspected or confirmed releases from the tanks and connected piping system, unusual operating conditions, release detection signals and environmental conditions suggesting a release may have occurred, and any spills and overfills that are not contained and cleaned up;

(g) properly close the underground tanks as required by law; and,

(h) comply with all federal, state and local legal requirements relevant to the operations of the underground tanks and all amendments to any permit to operate.

4. With respect to the operation of the underground storage tank system and monitoring equipment, Franchisee hereby acknowledges and agrees:

- that ARCO has provided Franchisee with training on each of the items described in the attached Monitoring and Response Plan,
- that Franchisee understood the content of the training, and asked any questions necessary to facilitate his understanding,
- that Franchisee indicated to ARCO at the time of training any subjects addressed by the training which Franchisee did not fully understand, and
- that Franchisee received complete training and information necessary for Franchisee to fully understand the subject of operating underground storage tanks.

5. Franchisor has provided Franchisee a copy of and Franchisee agrees to maintain on the Premises the Certificate of Financial Responsibility (as required by the United States Environmental Protection Agency in Subpart H, 40 CFR, Part 280 and California Health and Safety Code, Chapter 6.7, Section 25292.2).

6. Except to the extent they conflict with, or are less rigorous than the terms of this Amendment, all of the terms and conditions of the PMPA Agreement, as previously or hereafter amended or supplemented, remain in full force.

IN WITNESS WHEREOF, Franchisor and Franchisee have executed this Amendment.

WITNESS:

D.C. Van

ARCO Products Company
a division of AtlanticRichfieldCompany
Franchisor

By: J C Holgate
MANAGER

WITNESS:

D.C. Van

MASID GHANADAN
FRANCHISEE'S NAME

By: M. Ghanadan

DATE: 2/7/92

11/91

MONITORING AND RESPONSE PLAN - X

ARCO PRODUCTS COMPANY FACILITY WITH SECONDARY CONTAINMENT OF UNDERGROUND STORAGE TANKS & PRODUCT LINES

ARCO Facility 2035 Address 1001 San Pablo Ave.
Albany, CA 94706

This plan is designed to meet the monitoring and response requirements of Section 2634, Article 3, Title 23, CCR.

1. MONITORING EQUIPMENT

Secondarily contained storage tanks and lines at this facility are monitored by a continuous electronic leak detection system which consists of an alarm panel, sensors and associated electronics. Liquid sensors are installed in the annular space of each double wall tank and product line piping sump. Whenever a sensor detects the presence of a liquid there is both a visual and audible alarm at the control panel. In addition, the continuous monitor on the product piping system will shut down the pump and activate the alarm system when a release is detected or if the continuous product piping monitoring system fails or is disconnected, the pumping system will shut down.

Automatic line leak detectors are installed on the secondarily contained pressurized product piping. The line leak detector will detect a loss of pressure in the product lines and restrict the flow of product.

2. MAINTENANCE SCHEDULE OF MONITORING EQUIPMENT

The continuous electronic leak detection system including line leak detectors will be inspected according to the manufacturer's instructions by an outside contractor once during each calendar year.

3. ROUTINE MONITORING PROCEDURE

On a daily basis the facility operator shall:

A. Inspect the control panel for visual and audible alarm signals to confirm that the unit is operating.

B. Inspect island and tank fill areas for signs of spillage or petroleum sheen.

C. Record the inspection observations on the Daily Visual Monitoring Log (Form APPC-765: attached.)

4. RESPONSE PLAN

OPERATOR RESPONSIBILITIES

A. LEAK RECORDING AND REPORTING PROCEDURE

Whenever an alarm is activated, station personnel are to immediately:

a. Contact ARCO Maintenance or its designated agent by using the telephone number previously provided.

b. If any visible indications of petroleum products or vapors are noticed call 911.

c. Make an entry in the Recordable Discharge Log (Form APPC-765-1: attached) indicating the action taken.

d. Complete the Recordable Discharge Log when and as the source of the alarm is known.

ARCO RESPONSIBILITIES

B. METHOD OF REMOVING AN UNAUTHORIZED RELEASE FROM THE SECONDARY CONTAINMENT

a. Any unauthorized release into the secondary containment system of a product tank will be removed by pumping. Uncontaminated product may be returned to the tank. Contaminated product may be returned to the refinery to be recycled or may be disposed of following procedures in accordance with California Health and Safety Code requirements. In the event of an emergency, a pumping contractor or truck will be available immediately. In all other cases, equipment availability will be within 12 hours.

b. Any unauthorized release in the secondary containment system of a used oil tank will be pumped and disposed of following procedures in accordance with California Health and Safety Code requirements for used oil disposal.

c. ARCO Maintenance will be will be responsible for authorizing and selecting contractors for the work to be performed.

5. TRAINING

In addition to the training covering subjects mentioned in Sections 3 and 4 above, training needed for the operation of the tank system and monitoring equipment includes:

How to:

- Take tank level measurements
- Read dispenser meters
- Inspect equipment
- Recognize warning signs: dispenser hesitations, meter spins and odors
- Manually close dispenser impact valve
- Replace dispenser filters

TRAINING CONTINUED

- Shut down the system with and location of: ARCOmatic switch, electrical panel breakers, and emergency shut off switch
- Test the electronic monitor

6. **RECORDS RETENTION**

Written records of all monitoring, testing, and maintenance performed shall be maintained on-site or off-site at a readily available location for a period of at least 3 years. These records must be made available, upon request within 36 hours, to the local agency or the Board.

7. **PARTY RESPONSIBLE FOR PERFORMING THE MONITORING**

M. Gharib — Name

CO-OWNER — Title

8. **PARTY RESPONSIBLE FOR MAINTAINING EQUIPMENT**

ARCO — Name

1-800-ARCO FIX — PHONE

EXHIBIT A

ARCO Products Company
Division of AtlanticRichfieldCompany

Inventory Reconciliation Sheet
California

Facility:
Tank #:_____Size_____Product:_____Month/Year:_____

	1	2	3	4	5	6
	Previous Day's Dipstick Reading (Physically Measured)	Deliveries	Metered Sales	Calculated Inventory Column 1 + 2 - 3	Current Day's Dipstick Reading	Actual Variation Column 4 & 5 Subtract Smaller # from Larger #
Day	Gallons	Gallons	Gallons	Gallons	Gallons	+/-* Gallons
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
TOTAL						

*Subtract Smaller # from Larger #. If Column 4 is less than 5 (+). If Column 5 is less than 4 (-).

MONTHLY

ALLOWABLE VARIATION: Total of Column 2 _____ x .01 = _____ + 130 = _____gallons.
ACTUAL VARIATION: Total in Column 6 _____gallons.

If actual variation is greater than allowable variation, call ARCO Maintenance and follow the monitoring and response plan.

EXHIBIT B

ANNUAL INVENTORY RECONCILIATION SUMMARY REPORT

ARCO Facility #:_____

Address:_____

City:_____Zip: _____

A. _____ All inventory rariations for the above mentioned facility were within allowable limits of Section 2646, CCR, Title 23, Division 3, Chapter 16, for the 12 month period from _____ to _____, 19_____to 19_____.

B. _____ Inventory variations in excess of the allowable limits of Section 2646, occured on the following months, in the listed amounts, for the noted underground storage tanks.

From Inventory Reconciliation Sheet. If actual is greater than allowable, subtract actual from allowable and report difference as variation below.

Month	Product or Tank #	Product or Tank #	Product or Tank #	Product or Tank #

Submit report within 15 days following the end of the last month of the12-month time period covered by the report. Report to be submitted to your local implementing agency by Certified Mail if possible:. A copy of this report is to be submitted to:

ARCO Products Company
Environmental Compliance Administrator
17315 Studebaker Road
Cerritos, CA 90701-1488

I certify under penalty of perjury, that all variations (if any) exceeding allowable limits are indicated above:

_____ _____

Facility Tank Operator Date

ARCO Products Company
Division of AtlanticRichfieldCompany

Daily Visual Underground Storage Tank Monitoring Log

ARCO facility no.	Dealer/Franchisee	Month/Year

Day	System condition		Inspector initials	Comments
	Operational	Alarm*		
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				

*NOTE: IF ALARM CONDITION EXISTS IMMEDIATELY NOTIFY ARCO MAINTENANCE OR ITS AGENT DESIGNATED AND MAKE ENTRY ON ALARM ACTIVATION/DISCHARGE LOG

ARCO Products Company
Division of AtlanticRichfieldCompany

RECORDABLE DISCHARGE LOG
DOUBLE CONTAINMENT UNDERGROUND STORAGE TANK SYSTEM

ARCO Facility no.	Dealer/Franchisee			
Date/Time of Discovery	Reported to	Date/Time	Description of conditions	Corrective action taken

APPC-765-1 (5-89)

CALIFORNIA HEALTH AND SAFETY CODE DIVISION 20, CHAPTER 6.7

SECTION 25299

(a) Any operator of an underground tank system shall be liable for a civil penalty of not less than five hundred dollars ($500) or more than five thousand dollars ($5,000) for each underground storage tank for each day of violation for any of the following violations:

(1) Operating an underground tank system which has not been issued a permit, in violation of this chapter.

(2) Violation of any of the applicable requirements of the permit issued for the operation of the underground tank system.

(3) Failure to maintain records, as required by this chapter.

(4) Failure to report an unauthorized release, as required by Sections 25294 and 25295.

(5) Failure to property close an underground tank system, as required by Section 25298.

(6) Violation of any applicable requirement of this chapter or any requirement of this chapter or any regulation adopted by the board pursuant to Section 25299.3

(7) Failure to permit inspection or to perform any monitoring, testing, or reporting required pursuant to Section 25288 or 25289.

(8) Making any false statement, representation, or certification in any application, record, report, or other document submitted or required to be maintained pursuant to this chapter.

(b) Any owner of an underground tank system shall be liable for a civil penalty of not less than five hundred dollars ($500) or more than five thousand dollars ($5,000) per day for each underground storage tank, for each day of violation, for any of the following violations:

(1) Failure to obtain a permit as specified by this chapter.

(2) Failure to repair or upgrade an underground tank system in accordance with this chapter.

(3) Abandonment or improper closure of any underground tank system subject to this chapter.

(4) Knowing failure to take reasonable and necessary steps to assure compliance with this chapter by the operator of an underground tank system.

(5) Violation of any applicable requirement of the permit issued for operation of the underground tank system.

(6) Violation of any applicable requirement of this chapter of any regulation adopted by the board pursuant to Section 25299.3.

(7) Failure to permit inspection or to perform any monitoring, testing, or reporting required pursuant to Section 25288 or 25289.

(8) Making any false statement, representation, or certification in any application, record, report , or other document submitted or required to be maintained pursuant to this chapter.

(c) Any person who intentionally fails to notify the board or the local agency when required to do so by this chapter or who submits false information in a permit application, amendment, or renewal, pursuant to Section 25286, is liable for a civil penalty or not more than five thousand dollars ($5,000) for each underground storage tank for which notification is not given or false information is submitted.

(d) Any person who falsifies any monitoring records required by this chapter, or knowingly fails to report an unauthorized release, shall, upon conviction, be punished by a fine of not less than five thousand dollars ($5,000) or more than ten thousand dollars ($10,0000, by imprisonment in the county jail for not to exceed one year, or by both that fine and imprisonment.

(e) In determining both the civil and criminal penalties imposed pursuant to this section, the court shall consider all relevant circumstances, including, but not limited to, the extent of harm or potential harm caused by the violation, the nature of the violation and the period of time over which it occurred, the frequency of past violations, and the corrective action, if any, taken by the person who holds the permit.

(f) Each civil penalty or criminal fine imposed pursuant to this section for any separate violation shall be separate, and in addition to, any other civil penalty or criminal fine imposed pursuant to this section or any other provision of law, and shall be paid to the treasury of the local agency or state, whichever is represented by the office of the city attorney, district attorney, or Attorney General bringing the action. All penalties or fines collected on behalf of the board or a regional board by the Attorney General shall be deposited in the State Water Pollution Cleanup and Abatement Account in the State Water Quality Control Fund, and are available for expenditure by the board, upon appropriation, pursuant to Section 13441 of the Water Code.

(g) This section shall become operative on January 1, 1991. (Added by Stats. 1988, c. 296 Section 3, operative Jan. 1, 1991. Amended by Stats. 1989, c. 11397, Section 19, operative Jan. 1, 1991.)

Applied GeoSystems, Inc.
A RESNA Company

RESNA
Working To Restore Nature

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
Fax: (408) 264-2435

February 14, 1992
0211LSET.203
61026.01

Mr. Larry Seto
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94624

Subject: Site Status Update for ARCO Station 2035, 1001 San Pablo Avenue, Albany, California.

Dear Mr. Seto:

This letter provides an update on investigation and remedial activities conducted for the above-referenced site. This update covers site activities performed during January 1992, and site activities anticipated for the month of February 1992.

Status of Previous Months Activities:

January 6, 1992: Submitted a completed Wastewater Discharge Permit Application Package to East Bay Municipal Utility District (EBMUD).

January 19, 1992: Monthly groundwater monitoring was performed.

January 29, 1992: Floating product was removed from well RW-1.

Anticipated Work to be performed in the Next Month:

- Submit a draft report to ARCO detailing the results of the subsurface investigation and pump and recovery tests.
- Monthly groundwater monitoring will continue.
- Monthly removal of floating product will continue.

If you have any questions or comments regarding this letter, please call us at (408) 264-7723.

Sincerely,
RESNA

L. A. Leet

Lou Leet
Staff Geologist

Joel Coffman

Joel Coffman
Project Geologist

cc: Chuck Carmel, ARCO Products Company

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

January 27, 1992

Mr. Chuck Carmel
Arco Products Company
P.O. Box 5811
San Mateo, CA 94402

RE: Arco, 1001 San Pablo Avenue, Albany, CA

Dear Mr. Carmel:

Please submit a copy of Sequoia Analytical's chemical analysis for the soil samples taken in July '91 from the new tank location.

In addition, please submit a copy of the chemical analysis of the groundwater samples taken from your monitoring wells in October '91.

If you have any questions, please contact me at (510) 271-4320.

Sincerely,

Larry Seto
Sr. Hazardous Materials Specialist

cc: Gil Jensen, Alameda County District Attorney's Office
Eddie So, RWQCB
Howard Hatayama, DTSC
Rafat Shahid, Assistant Agency Director, Enviromental Health
Joel Coffman, Applied GeoSystems, Inc.
Files

January 14, 1992

92 JAN 15 PM 2:17

Mr. Edgar Howell
Alameda County Department of Environmental Health
80 Swan Way
Oakland, California 94621

ARCO Products Company Facilities in Alameda County

Dear Mr. Howell:

Please find attached, Quarterly Summary Reports (QSRs) for ARCO Products Company Service Stations in Alameda County. The QSRs summarize activities conducted by ARCO at the respective sites during the fourth quarter of 1991; also included are projected site activities for the first quarter of 1992 and a bibliography of reports submitted for each location.

The QSRs are classified by city and address within Alameda County. We are submitting this document and attached QSRs as agreed. Please note that we are forwarding copies of the QSRs to the Regional Water Quality Control Board (RWQCB).

Please note that ARCO Products Company has reviewed the RWQCB's February 19, 1991 printout of ARCO fuel leak sites. We have evaluated each site with respect to ARCO's responsibility for investigation, monitoring, and/or remediation. Those locations for which ARCO is not responsible were listed and described in the QSR package delivered to you on July 15, 1991. The attached QSRs therefore represent only those locations for which ARCO is responsible.

ARCO is planning a subsequent comprehensive QSR submittal for ARCO sites on April 15, 1992. Please do not hesitate to contact us with any questions regarding this submittal.

Sincerely yours,

James D Ritchie /for

Kyle A. Christie
Environmental Engineer

Attachments: ARCO Facility QSRs

A:\arcoqsrs\consmrg.ltr
50013-004-06

UST LEAK SITE UPDATE

Date of Last Review/Update: September 6, 1991

Current Date: January 6, 1992

SITE IDENTIFICATION

Name: ARCO Service Station 2035 Case No.:

Address: 1001 San Pablo Avenue
Street Number Street

Albany 94706
City ZIP Code

County: Alameda Substance: Gasoline

Local Agency: Alameda County Health Care Services Agency

Regional Board: Regional Water Quality Control Board - San Francisco Bay Area

LEAD STAFF PERSON

ACHCSA - Larry Seto

CASE TYPE

____	Undetermined	____	Soil Only	__X__	Ground Water	____	Drinking Water

STATUS (Date indicates when case moved into status)

____	No Action Taken		
__X__	Leak Being Confirmed	Date	1/90
__X__	Preliminary Site Assessment Workplan Submitted	Date	4/29/91
__X__	Preliminary Site Assessment Underway	Date	7/1/91
__X__	Pollution Characterization	Date	10/91
__X__	Remediation Plan	Date	11/91
____	Remedial Action Underway	Date	
____	Post Remedial Action Monitoring	Date	
____	Case Referred to Regional Board	Date	
____	Case Referred to Dept. of Health Services	Date	
____	Case Closed	Date	

COMMENTS/MILESTONES:

USTs and product lines replaced in August - September 1991; impacted backfill excavated and aerated onsite. Treated soil removed to landfill. Installed three 4-inch diameter groundwater monitoring wells and one 6-inch diameter groundwater monitoring well. Performed aquifer pump test in November 1991.

RECENT ACTIVITIES/FINDINGS:

Last Quarter Activities: Tank replacement performed, drilled two soil borings and submitted Tank Replacement report on 9/6/91.

Current Quarter Activities: October through December 31, 1991, three monitoring wells and one recovery well were installed and a pump test was performed at the site. A Subsurface Environmental Investigation and Pump Test report is being prepared.

ANTICIPATED ACTIVITIES:

Next Quarter Activities: Submit completed Subsurface Environmental Investigation and Pump Test report.

Prepare Work Plan for next phase of work.

Reports documenting the site's history are listed on page 2.

REPORT	DATE	CONSULTANT
Addentum Two to Work Plan	9/24/91	RESNA
Underground Gasoline-Storage Tank Removal and Replacement 69036.03	9/11/91	RESNA
Work Plan for Subsurface Investigation and Remediation and Addendum One to Work Plan (AGS 69036-2).	4/29/91	RESNA/Applied GeoSystems
Limited Environmental Site Assessment AGS 69036-1	1/24/90	Applied GeoSystems

Applied GeoSystems, Inc.
A RESNA Company

RESNA
Working To Restore Nature

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
Fax: (408) 264-2435

January 10, 1992
0108LSET.203
61026.01

Mr. Larry Seto
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94624

Subject: Site Status Update for ARCO Station 2035, 1001 San Pablo Avenue, Albany, California.

Dear Mr. Seto:

This letter provides an update on investigation and remedial activities conducted for the above-referenced site. This update covers site activities performed during December 1991, and site activities anticipated for the month of January 1992.

Status of Previous Months Activities:

- Continued to work on draft report of subsurface investigation and pump test.
- Continued permitting process for eventual discharge of treated groundwater.

Anticipated Work to be performed in the Next Month:

- Submit a draft report to ARCO detailing the results of the subsurface investigation and pump and recovery tests.
- Initiate a groundwater monitoring and quarterly sampling program for this site.
- Submit a completed Wastewater Discharge Permit Application Package to East Bay Municipal Utility District (EBMUD).

If you have any questions or comments regarding this letter, please call us at (408) 264-7723.

Sincerely,
RESNA

Robert D. Campbell
Staff Geologist

Joel Coffman
Project Geologist

RESNA

Applied GeoSystems, Inc.
A RESNA Company

RESNA
Working To Restore Nature

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
Fax: (408) 264-2435

December 9, 1991
1210LSET.203
61026.01

Mr. Larry Seto
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94624

Subject: Site Status Update for ARCO Station 2035, 1001 San Pablo Avenue, Albany, California.

Dear Mr. Seto:

This letter provides an update on investigation and remedial activities conducted for the above-referenced site. This update covers site activities performed during November 1991, and site activities anticipated for the month of December 1991.

November 1, 1991:	Scheduled delivery of 4,000 gallon tank (Baker Tanks) to the site to be used for the step test and pump test.
November 4, 1991:	Informed station manager and ARCO representative about the delivery of the tank, step test and pump test dates.
	Site visit to measure depth-to-water in the wells.
November 6, 1991:	Site visit to supervise the delivery of Baker Tank.
November 7, 1991:	Performed a step-test. Step-test data results indicated the optimum pump rate to be 1 gallon per 35 seconds.
November 11, 1991:	Scheduled H&H Shipping Company to haul water from Baker Tank after pump test.
November 14-15, 1991:	Performed 18-hour pump test and 6-hour recovery test.

November 15, 1991: Purge water generated during step and pump tests was hauled off by H&H Shipping Company. Baker Tanks remeved the tank from the site.

Anticipated Work to be performed in the Next Month:

- Submit a report detailing the results of the subsurface investigation and pump and recovery tests.
- Initiate a groundwater monitoring and quarterly sampling program for this site.
- Submit a completed Wastewater Discharge Permit Application Package to East Bay Municipal Utility District (EBMUD).
- Initiate worksteps to generate a complete design/drawing package for the proposed groundwater-extraction and treatment system. The package will include D-size drawings of site, remediation compound layouts, trench section details, one-line electrical diagram, process and instrumentation diagram (P&ID) and equipment specification list.
- Submit a completed Air Permit Application Package if necessary, to the Bay Area Air Quality Management District (BAAQMD) to allow for construction and installation of a proposed groundwater-extraction and treatment system.

If you have any questions or comments regarding this letter, please call us at (408) 264-7723.

Sincerely,
RESNA

Barbara Sieminski

Barbara Sieminski
Staff Geologist

Joel Coffman

Joel Coffman
Project Geologist

Applied GeoSystems, Inc.
A RESNA Company

RESNA
Working To Restore Nature

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
Fax: (408) 264-2435

91 NOV 18 AM 8:56

TRANSMITTAL

TO: MR. LARRY SETO
ALAMEDA COUNTY HEALTH CARE SERVICES
AGENCY-DEH
80 SWAN WAY, ROOM 200
OAKLAND, CALIFORNIA 94621

DATE: 11/15/91
PROJECT NUMBER: 61026.01
SUBJECT: ARCO SITE STATUS UPDATES

FROM: JOEL COFFMAN
TITLE: PROJECT GEOLOGIST

WE ARE SENDING YOU [XX] Attached [ ] Under separate cover via _____ the following items:

[ ] Shop drawings [ ] Prints [ ] Reports [ ] Specifications

[ ] Letters [ ] Change Orders [XX] SEE BELOW

COPIES	DATED	NO.	DESCRIPTION
1 EACH	11/15/91		ARCO SITE STATUS UPDATES FOR THE FOLLOWING ARCO STATIONS: 2035 AND 601.

THESE ARE TRANSMITTED as checked below:

[ ] For review and comment [ ] Approved as submitted [ ] Resubmit ___ copies for approval

[ ] As requested [ ] Approved as noted [ ] Submit ___ copies for distribution

[ ] For approval [ ] Return for corrections [ ] Return ___ corrected prints

[ ] For your files [ ] _____

REMARKS: CC: MR. CHUCK CARMEL OF ARCO PRODUCTS COMPANY.

Copies: 1 to AGS project file no. 61026.01

SAN JOSE READER'S FILE

Revision Date: 10/15/90
File Name: TRANSMT.PRJ

LS

UST LEAK SITE UPDATE

Date of Last Review/Update: September 6, 1991

Current Date: January 6, 1992

SITE IDENTIFICATION

Name: ARCO Service Station 2035

Case No.:

Address: 1001 San Pablo Avenue
Street Number Street

Albany 94706
City ZIP Code

County: Alameda

Substance: Gasoline

Local Agency: Alameda County Health Care Services Agency

Regional Board: Regional Water Quality Control Board - San Francisco Bay Area

LEAD STAFF PERSON

ACHCSA - Larry Seto

CASE TYPE

____	Undetermined	____	Soil Only	X	Ground Water	____	Drinking Water

STATUS (Date indicates when case moved into status)

____	No Action Taken		
X	Leak Being Confirmed	Date	1/90
X	Preliminary Site Assessment Workplan Submitted	Date	4/29/91
X	Preliminary Site Assessment Underway	Date	7/1/91
X	Pollution Characterization	Date	10/91
X	Remediation Plan	Date	11/91
____	Remedial Action Underway	Date	
____	Post Remedial Action Monitoring	Date	
____	Case Referred to Regional Board	Date	
____	Case Referred to Dept. of Health Services	Date	
____	Case Closed	Date	

COMMENTS/MILESTONES:

USTs and product lines replaced in August - September 1991; impacted backfill excavated and aerated onsite. Treated soil removed to landfill. Installed three 4-inch diameter groundwater monitoring wells and one 6-inch diameter groundwater monitoring well. Performed aquifer pump test in November 1991.

RECENT ACTIVITIES/FINDINGS:

Last Quarter Activities: Tank replacement performed. drilled two soil borings and submitted Tank Replacement report on 9/6/91.

Current Quarter Activities: October through December 31, 1991, three monitoring wells and one recovery well were installed and a pump test was performed at the site. A Subsurface Environmental Investigation and Pump Test report is being prepared.

ANTICIPATED ACTIVITIES:

Next Quarter Activities: Submit completed Subsurface Environmental Investigation and Pump Test report.

Prepare Work Plan for next phase of work.

Reports documenting the site's history are listed on page 2.

REPORT	DATE	CONSULTANT
Addentum Two to Work Plan	9/24/91	RESNA
Underground Gasoline-Storage Tank Removal and Replacement 69036.03	9/11/91	RESNA
Work Plan for Subsurface Investigation and Remediation and Addendum One to Work Plan (AGS 69036-2).	4/29/91	RESNA/Applied GeoSystems
Limited Environmental Site Assessment AGS 69036-1	1/24/90	Applied GeoSystems

Applied GeoSystems, Inc.
A RESNA Company

RESNA
Working To Restore Nature

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
Fax: (408) 264-2435

November 15, 1991
1023LSET.203
61026.01

Mr. Larry Seto
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94624

Subject: Site Status Update for ARCO Station 2035, 1001 San Pablo Avenue, Albany, California.

Dear Mr. Seto:

This letter provides an update on investigation and remedial activities conducted for the above-referenced site. This update covers site activities performed during August 1991 through October 1991, and site activities anticipated for the month of November 1991.

Status of Previous Months Activities:

August 1 - 2, 1991: Aerated excavated soils were disposed by Dillard Trucking, a licensed waste hauler to Redwood Landfill Inc., a Class III Landfill in Novato, California. These excavated stockpiled soils were generated during removal of underground storage tanks (USTs), and associated product lines at the site.

August 3, 1991: Excavated USTs T1, T2, T3, and T4 were transported by Erickson, Inc. a licensed waste hauler, to a license disposal facility in Richmond, California.

August 9, 1991: Resampled for petroleum hydrocarbons in the vicinity of the product line sample S-1-PL4. Laboratory results reported total petroleum hydrocarbons (TPH)-a-gasoline concentrations of 4.1 parts per million in comparison to the anamolously high value of 4,200 ppm reported when sampled on July 19, 1991. Soil excavated in this vicinity was aerated and disposed.

August 27, 1991: Meeting with Mr. Larry Seto of Alameda County Health Care Services Agency (ACHCSA) for a final inspection of the site. Discussed future plans to speed up additional assessment and interim remediation at the site.

August 30, 1991: Submitted drilling permit applications to Alameda County Flood Control & Well Control District (ACFCWCD) to install proposed recovery and monitoring wells.

September 11, 1991: Submitted the final Underground Storage Tank Removal and Replacement Report to ARCO and governing agencies.

September 19, 1991: Submitted to ARCO a draft Addendum Two to Work Plan for Subsurface Investigations and Remediation. The addendum outlined proposed worksteps to be conducted and included installation of a recovery well and groundwater monitoring wells, development and sampling of wells, pump test and initiation of necessary permitting to allow for discharge of treated groundwater.

September 24, 1991: Submitted a final copy of Addendum Two to Work Plan to ARCO and governing agencies.

October 2, 1991: Received a written approval from ACHCSA to proceed with worksteps outlined in Addendum Two to Work Plan, submitted September 24, 1991.

Contacted several drilling contractors to get bid estimates to install proposed recovery and groundwater monitoring wells.

October 3, 1991: Received from drilling contractors bid estimates to install the proposed wells. Approved use of Exceltech Inc. to install wells.

Contacted Cruz Brothers to locate the boring locations on October 4, 1991.

October 4, 1991: Per a verbal conversation with Mr. Wyman Hong of ACFCWD the drilling permit applications submitted on August 30, 1991 were valid through November 1991, and that no repermitting as initially indicated by Mr. Craig Mayfield was necessary. A

formal report detailing results of installation will be mailed to ACFCWD thirty days after the installation is initiated.

October 7, 1991: Received from ACFCWD drilling well permit # 91497 to install the proposed recovery and monitoring wells.

October 14 - 16 1991: Drilled and installed monitoring wells MW-1, MW-2 and MW-3. Also drilled and installed recovery well RW-1.

October 15, 1991: Initiated compiling all necessary information for submittal of a completed Wastewater Discharge Permit Application to East Bay Municipal Utility District (EBMUD) to allow for discharge of treated groundwater to the sewer.

October 24, 1991: Developed installed recovery and monitoring wells.

October 29, 1991: Sampled wells MW-1, MW-2 and MW-3 for petroleum hydrocarbons, purgeable halocarbons and metals.

Anticipated Work to be performed in the Next Month:

- Complete a pump test on RW-1.
- Initiate a groundwater monitoring and quarterly sampling program for this site.
- Submit a completed Wastewater Discharge Permit Application Package to EBMUD.
- Initiate worksteps to generate a complete design/drawing package for the proposed groundwater-extraction and treatment system. The package will include D-size drawings of site, remediation compound layouts, trench section details, one-line electrical diagram, process and instrumentation diagram (P&ID) and equipment specification list.
- Submit a completed Air Permit Application Package if necessary, to the B Bay Area Air Quality Management District (BAAQMD) to allow for construction and installation of a proposed groundwater-extraction and treatment system.

If you have any questions or comments regarding this letter, please call us at (408) 264-7723.

Sincerely,
RESNA

Valli Voruganti
Project Engineer

Joel Coffman
Project Geologist

Applied GeoSystems, Inc.
A RESNA Company

RESNA
Working To Restore Nature

91 OCT 15 AM 8:59
3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
Fax: (408) 264-2435

October 11, 1991
69036.02
1011seto

Mr. Larry Seto
Alameda County Health Care Services Agency
Hazardous Materials Division
80 Swan Way, Room 200
Oakland, California 94621

Subject: Confirmation of drilling and well installation dates at ARCO Station 2035, 1001 San Pablo Avenue, Albany, California.

Dear Mr. Seto:

As discussed in our telephone conversation of October 9, 1991, this letter is to confirm the dates for drilling soil borings and installing the groundwater recovery well and three groundwater monitoring wells at the subject site. Drilling is scheduled to begin on Monday, October 14, 1991 at approximately 8:00 a.m. It is estimated to take three days to complete this portion of the ongoing subsurface investigation at the site.

As requested by you, should this investigation fall behind the estimated time of completion by two weeks, you will be given formal written notice with explanation.

If you have any questions or comments, please call me at (408) 264-7723.

Sincerely,
RESNA

Joel Coffman
Project Geologist

cc: Mr. Chris Winsor, ARCO Products Company
Mr, Chuck Carmel, Arco Products Company
Mr. John Meck, ARCO Products Company
Mark Thompson, Alameda County District Attorney's Office
Mr. Howard Hatayama, State Department of Health Services

Applied GeoSystems, Inc.
A RESNA Company

RESNA
Working To Restore Nature

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
Fax: (408) 264-2435

91 OCT 15 AM 11:21

TRANSMITTAL

TO: MR. LARRY SETO
ALAMEDA COUNTY HELATH CARE SERVICES
AGENCY-HAZ. MAT. DIVISION
80 SWAN WAY, ROOM 200
OAKLAND, CALIFORNIA 94621

DATE: 10/11/91
PROJECT NUMBER: 69036.02
SUBJECT: ARCO STATION 2035 AT 1010 SAN PABLO AVENUE, ALBANY, CALIF.

FROM: JOEL COFFMAN
TITLE: PROJECT GEOLOGIST

WE ARE SENDING YOU [XX] Attached [ ] Under separate cover via _____ the following items:

[ ] Shop drawings [ ] Prints [ ] Reports [ ] Specifications

[XX] Letters [ ] Change Orders [ ] _____

COPIES	DATED	NO.	DESCRIPTION
1	10/11/91		LETTER CONFIRMATION OF DRILLING AND WELL INSTALLATION DATES AT THE ABOVE SUBJECT SITE.

THESE ARE TRANSMITTED as checked below:

[ ] For review and comment [ ] Approved as submitted [ ] Resubmit ___ copies for approval

[XX] As requested [ ] Approved as noted [ ] Submit ___ copies for distribution

[ ] For approval [ ] Return for corrections [ ] Return ___ corrected prints

[ ] For your files [ ] _____

REMARKS: COPIES OF THIS LETTER ARE BEING FORWARDED TO:
MR. CHRIS WINSOR, ARCO PRODUCTS COMPANY
MR. CHUCK CARMEL, ARCO PRODUCTS COMPANY
MR. JOHN MECH, ARCO PRODUCTS COMPANY
MR. MARK THOMPSON, ALAMEDA COUNTY DISTRICT ATTORNEY'S OFFICE
MR. HOWARD HATAYAMA, STATE DEPT. OF HEALTH SERVICES

Copies: 1 to AGS project file no. 69036.02 SAN JOSE READER'S FILE

Revision Date: 10/15/90
File Name: TRANSMT.PRJ

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

September 26, 1991

Mr. Chuck Carmel
Arco Products Company
P.O. Box 5811

San Mateo, California 94402

RE: Arco Station 2035, 1001 San Pablo Avenue
Albany, California

Dear Mr. Carmel:

I have reviewed your Addendum Two to Work Plan for Subsurface Investigations and Remediation dated September 24, 1991 that was prepared by Applied Geosystems, Inc. The plan as proposed is acceptable. You are requested to notify this office if the work is more than two weeks behind your Preliminary Time Schedule.

If you have any questions, please contact me at (510) 271-4320.

Sincerely,

Larry Seto
Sr. Hazardous Materials Specialist

cc: Gil Jensen, Alameda Distrist Attorney's Office
RWQCB
Howard Hatayama, DOHS
Rafat Shahid, Asst. Agency Director
Joel Coffman, Applied GeoSystems,Inc.
Files

ARCO Products Company
2000 Alameda de las Pulgas
Mailing Address: Box 5811
San Mateo, California 94402
Telephone 415 571 2400

Date: October 14, 1991

Re: ARCO Station #

" I declare, that to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached proposal or report are true and correct."

Submitted by:

Kyle A. Christie
Environmental Engineer

October 14, 1991

Alameda County Department of Environmental Health
80 Swan Way
Oakland, California 94621

Attention: Mr. Edgar Howell

ARCO Products Company Facilities in Alameda County

Dear Mr. Howell:

Please find attached, Quarterly Summary Reports (QSRs) for ARCO Products Company Service Stations in Alameda County. The QSRs summarize activities conducted by ARCO at the respective sites during the third quarter of 1991; also included are projected site activities for the fourth quarter of 1991 and a bibliography of reports submitted for each location.

The QSRs are classified by County and by address within the County. We are submitting this document and attached QSRs as previously agreed. Please note that we are forwarding copies of the QSRs to the Regional Water Quality Control Board (RWQCB).

Please also note that ARCO Products Company has reviewed the RWQCB's February 19, 1991 printout of ARCO fuel leak sites. We evaluated each site with respect to ARCO's responsibility for investigation, monitoring, and/or remediation. Those locations for which ARCO is not responsible were listed and described in the QSR package delivered to you on July 15, 1991. The attached QSRs therefore represent only those locations for which ARCO is responsible.

ARCO is planning a subsequent QSR submittal for ARCO sites on January 15, 1992. Please do not hesitate to contact me with any questions regarding this submittal.

Sincerely,

Kyle A. Christie
Environmental Engineer

Attachments:
ARCO Facility QSRs

UST LEAK SITE UPDATE

Date of Last Review/Update: April 15, 1991

Current Date: September 6, 1991

SITE IDENTIFICATION

Name: ARCO Service Station 2035

Case No.:

Address: 1001 San Pablo Avenue
Street Number / Street

Albany
City

94706
ZIP Code

County: Alameda

Substance: Gasoline

Local Agency: Alameda County Health Care Services Agency

Regional Board: Regional Water Quality Control Board - San Francisco Bay Area

LEAD STAFF PERSON

ACHCSA - Larry Seto

CASE TYPE

____	Undetermined	____	Soil Only	X	Ground Water	____	Drinking Water

STATUS (Date indicates when case moved into status)

____	No Action Taken		
X	Leak Being Confirmed	Date	1/90
X	Preliminary Site Assessment Workplan Submitted	Date	4/29/91
X	Preliminary Site Assessment Underway	Date	7/1/91
X	Pollution Characterization	Date	9/15/91 (scheduled)
____	Remediation Plan	Date	
____	Remedial Action Underway	Date	
____	Post Remedial Action Monitoring	Date	
____	Case Referred to Regional Board	Date	
____	Case Referred to Dept. of Health Services	Date	
____	Case Closed	Date	

REMEDIAL ACTIONS

USTs and product lines replaced in August - September 1991; impacted backfill excavated and aerated onsite. Treated soil removed to landfill.

COMMENTS

Last Quarter Activities: Submitted Work Plan for a subsurface investigation at the site (April 29, 1991) will be implemented following tank replacement.

Current Quarter Activities: July 1 through September 15 (estimated) 1991, tank replacement activities performed at site. Proceed with monitoring well installation pending completion. Tank replacement report to be issued September 1991.

Next Quarter Activities: Prepare Addendum Two to Work Plan for recovery well installation and pump test to be prepared September 1991. Perform installation of recovery well and pump test; prepare report.

Reports documenting the site's history are listed on page 2.

REPORT	DATE	CONSULTANT
Underground Gasoline-Storage Tank Removal and Replacement	9/6/91	RESNA
Work Plan for Subsurface Investigation and Remediation and Addendum One to Work Plan (AGS 69036-2).	4/29/91	RESNA/Applied GeoSystems
Limited Environmental Site Assessment AGS 69036-1	1/24/90	Applied GeoSystems

ARCO PRODUCTS COMPANY
FACILITY LIST - LOS ANGELES REGION
BY STATE COUNTY
10/24/1991, 09:20 AM

STATE: CALIFORNIA COUNTY: ALAMEDA

FAC	DEALER	ADDRESS	CITY/STATE	--	ZIP	CROSS STREET	PHONE
00276	DAI VAN VO	10600 MACARTHUR BLVD	OAKLAND	CA	94605	10TH AVE/MACARTHUR B	415-635-4641
00374	SANTOSH KUMAR SUD	6407 TELEGRAPH AVENU	OAKLAND	CA	94609	ALCATRAZ AVE/TELEGRA	415-658-7508
00498	REGION OPERATION 5157	286 SO LIVERMORE AVE	LIVERMORE	CA	94550	3RD ST/S LIVERMORE A	415-449-1448
00608	JAIME & LEONORA ABADAM 5yr ✓	17601 HESPERIAN BLVD	SAN LORENZO	CA	94580	HACIENDA/HESPERIAN B	415-278-2977
00[redacted]	JERRY SHIELDS	899 RINCON AVENUE	LIVERMORE	CA	94550	PINE/RINCON AVE	415-447-1329
02035	RAHMAN FARSI/MAJID GHANADAN	1001 SAN PABLO AVENU	ALBANY	CA	94706	MARIN/SAN PABLO AVE	415-525-1362
02107	PRITINDER ARORA	3310 PARK BLVD.	OAKLAND	CA	94610	MACARTHUR/PARK BLVD	415-532-1716
02112	JAVAD ROOSHAN 5yr ✓	1260 PARK STREET	ALAMEDA	CA	94501	ENCINAL/PARK ST	415-865-7335
02152	JAMES A WALKER	22141 CENTER ST.	CASTRO VALLEY	CA	94546	GROVE/CENTER ST	415-581-1268
02169	RAMESH SOOD	889 W GRAND AVE	OAKLAND	CA	94607	MARKET/W GRAND AVE	415-465-4450
02185	B J A INC	9800 E 14TH ST	OAKLAND	CA	94603	98TH/E 14TH	415-568-0590
04494	KHALIL N ROOSHAN 5yr ✓	566 HEGENBERGER RD.	OAKLAND	CA	94605	EDES/HEGENBERGER RD	415-569-7561
04931	VINTNERS DISTRIBUTORS INC	731 W MACARTHUR BLVD	OAKLAND	CA	94611	WEST/W MACARTHUR BLV	415-658-5000
04977	MICHAEL SEROY	2770 CASTRO VALLEY R	CASTRO VALLEY	CA	94546	WISTERIA/CASTRO VALL	415-582-6919
06002	SAMIR PATEL 5yr. ✓	6235 SEMINARY AVENUE	OAKLAND	CA	94605	HWY 580/SEMINARY	415-633-1042
06041	RONALD E TEUTSCH	7249 VILLAGE PARKWAY	DUBLIN	CA	94566	AMADOR/VILLAGE PKWY	415-828-3163
06113	PRESTIGE STATIONS INC 5158	785 E STANLEY BLVD	LIVERMORE	CA	94550	MURRIETTA/E STANLEY	415-449-2024
06148	JIN H KANG	5131 SHATTUCK AVE.	OAKLAND	CA	94609	52ND/SHATTUCK	415-654-3461

W. F. Lewis Construction, Inc.

August 22, 1991

Alameda County
Health Care Services Agency
Department of Environmental Health
Hazardous Materials Division
80 Swan Way, Room 200
Oakland, CA 94621

Attn: Mr. Larry Seto

Re: Permit No. 592423
ARCO F/N 2035
1001 San Pablo Avenue
Albany, California

Dear Mr. Seto,

This letter is to confirm our telephone conversation this morning regarding the final inspection of the completed work at the above job site. Your final inspection is scheduled for Tuesday, August 27, 1991 at 11:00 a.m.

If you have any questions, please call.

Sincerely,

Janet Sill

Janet Sill
Job Coordinator

91 AUG 23 PM 02:08

cc: Mr. Steve Straus, Applied GeoSystems
Mr. Tom Wray, ARCO

506 Glide Avenue • West Sacramento, California 95691 • (916) 372-2755
State Contractors License Number B-348937

August 22, 1991

Alameda County
Health Care Services Agency
Department of Environmental Health
Hazardous Materials Division
80 Swan Way, Room 200
Oakland, CA 94621

Attn: Mr. Larry Seto

Re: Permit No. 592423
ARCO F/N 2035
1001 San Pablo Avenue
Albany, California

Dear Mr. Seto,

This letter is to confirm our telephone conversation this morning regarding the final inspection of the completed work at the above job site. Your final inspection is scheduled for [illegible] 27, 1991 at 11:00 a.m.

If you have any questions, please call.

Sincerely

Janet Sli[illegible]
Job Coord[illegible]

cc: Mr. Steve Strauss, Applied GeoSystems
Mr. Tom Wray, ARCO

506 Glide Avenue • West Sacramento, California 95691 • (916) 372-2755
State Contractors License Number B-348937

ON3

Fax Transmittal Memo 7672

To: Mr. Larry Seto

Company: Alameda County Environmental Health

Location:

Fax #: (415) 568-3706

Telephone #:

Comments:

No. of Pages: 1

Today's Date: 8/22/91

Time: 11:00

From: Janet Sill

Company: W.F. Lewis Construction, Inc.

Location:

Dept./Group:

Fax #: (916) 372-6180

Telephone #: (916) 372-2755

Original Disposition: ☐ Destroy ☐ Return ☐ Call for pickup

W. F. Lewis Construction, Inc.

W. F. Lewis Construction, Inc.

August 21, 1991

Alameda County
Health Care Services Agency
Department of Environmental Health
Hazardous Materials Division
80 Swan Way, Room 200
Oakland, CA 94621

Attn: Mr. Larry Seto

Re: Permit No. 592423
ARCO F/N 2035
1001 San Pablo Avenue
Albany, California

Dear Mr. Seto,

This Letter is to advise you that we have completed the fuel storage installation at the above site. Gas will be placed in the tanks on Monday, August 26, 1991.

If you have any questions, please call.

Sincerely,

Walter F. Lewis

WFL/jan

cc: Mr. Tom Wray, ARCO

91 AUG 22 AM 11:55

506 Glide Avenue • West Sacramento, California 95691 • (916) 372-2755
State Contractors License Number B-348937

W. F. Lewis Construction, Inc.

August 21, 1991

Alameda County
Health Care Services Agency
Department of Environmental Health
Hazardous Materials Division
80 Swan Way, Room 200
Oakland, CA 94621

Attn: Mr. Larry Seto

Re: Permit No. 92423
ARCO F/N 2035
1001 San Pablo Avenue
Albany, California

Dear Mr. Seto,

This letter is to advise you that we have complet[illegible]
storage installation at the above site. Gas will be [illegible]
service on Monday, August 26, 1991.

If you have any questions, please call.

Sincerely,

Walter [illegible]

cc: Mr. Tom Wrey, ARCO

8/22/91
I asked Jan of Lewis Const. to ask Walter to call me concerning setting up an appt. for the final insp. I told her they cannot pump gas until I perform and pass their final insp.

506 Glide Avenue • West Sacramento, California 95691 • (916) 372-2755
State Contractors Licenee Number B-348937

Post-it Fax Transmittal Memo 7672

To Mr Larry Seto		No. of Pages 1	Today's Date 8/21	Time 3:40
Company Alameda County		From WALTER F. LEWIS	
Location		Company W F LEWIS CONST	
Fax # (510) 568-3706	Telephone #	Location	Dept. Charge
Comments		Fax #	Telephone # (916) 372-2752
		Original Disposition:	Destroy / Return / Call for pickup

Hard copy to follow in US mail -

white -env.health
yellow -facility
pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

Hazardous Materials Inspection Form

80 Swan Way, #200
Oakland, CA 94621
(415) 271-4320

II,III

Site ID # ____ Site Name Arco - Today's Date 8/6/91

Site Address 1001 San Pablo Ave.

City Albany Zip 94706 Phone ____

____ MAX-AMT stored > 500 lbs, 55 gal., 200 cft.?

Inspection Categories:
- ___ I. Haz. Mat/Waste GENERATOR/TRANSPORTER
- ✓ II. Business Plans, Acute Hazardous Materials
- ___ III. Underground Tanks

* Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)

II.A BUSINESS PLANS (Title 19)

___	1. Immediate Reporting	2703
___	2. Bus. Plan Stds.	25503(b)
___	3. RR Cars > 30 days	25503.7
___	4. Inventory Information	25504(a)
___	5. Inventory Complete	2730
___	6. Emergency Response	25504(b)
___	7. Training	25504(c)
___	8. Deficiency	25505(a)
___	9. Modification	25505(b)

II.B ACUTELY HAZ. MAT'LS

___	10. Registration Form Filed	25533(a)
___	11. Form Complete	25533(b)
___	12. RMPP Contents	25534(c)
___	13. Implement Sch. Req'd? (Y/N)	___
___	14. OffSite Conseq. Assess.	25524(c)
___	15. Probable Risk Assessment	25534(d)
___	16. Persons Responsible	25534(g)
___	17. Certification	25534(l)
___	18. Exemption Request? (Y/N)	25536(b)
___	19. Trade Secret Requested?	25538

III. UNDERGROUND TANKS (Title 23)

General

___	1. Permit Application	25284 (H&S)
___	2. Pipeline Leak Detection	25292 (H&S)
___	3. Records Maintenance	2712
___	4. Release Report	2651
___	5. Closure Plans	2670

Monitoring for Existing Tanks

___ 6. Method
1) Monthly Test
2) Daily Vadose
Semi-annual gndwater
One time soils
3) Daily Vadose
One time soils
Annual tank test
4) Monthly Gndwater
One time soils
5) Daily Inventory
Annual tank testing
Cont pipe leak det
Vadose/gndwater mon.
6) Daily Inventory
Annual tank testing
Cont pipe leak det
7) Weekly Tank Gauge
Annual tank tsting
8) Annual Tank Testing
Daily Inventory
9) Other ____

___	7. Precis Tank Test Date: ____	2643
___	8. Inventory Rec.	2644
___	9. Soil Testing.	2646
___	10. Ground Water.	2647

New Tanks

___	11. Monitor Plan	2632
___	12. Access. Secure	2634
___	13. Plans Submit Date: ____	2711
___	14. As Built Date: ____	2635

Rev 6/88

Comments: 1:00PM - 1:30PM

Visited the site; Verified that line pressure test, secondary containment leak test, conducted 8/5/91 & 8/6/91 were witnessed by the Albany Fire Department Inspector, Mr. Tom Williams (F) W.F. Lewis Construction documented the Fire Inspector witnessed the testing & will be sending the dept copies of this records. Fire Inspector was Mr. Frank Westphal.

II, III

Contact: ____

Title: ____ Inspector: ____

Signature: ____ Signature: Arlene L. Hugo

W. F. Lewis Construction, Inc.

August 2, 1991
Fax No.(415) 568-3706

Alameda County
Health Care Services Agency
Department of Environmental Health
Hazardous Materials Division
800 Swan Way, Room 200
Oakland, CA 94621

Attn: Mr. Larry Seto/Ms. Susan Hugo

Re: Permit No. 592423
ARCO F/N 2035
1001 San Pablo Avenue
Albany, CA 94706

Dear Mr. Seto/Ms. Hugo,

This is to confirm our phone message that we are completing the piping and backfilling on 8-5-91. The line pressure test will be witnessed by the City of Albany Fire Department Inspector.

If you have any questions, please call.

Sincerely,

Walter F. Lewis

WFL/rr

cc: Mr. Ron Miles, ARCO

91 AUG -5 AM 8:59

506 Glide Avenue • West Sacramento, California 95691 • (916) 372-2755
State Contractors License Number B-348937

W. F. Lewis Construction, Inc.

August 2, 1991
Fax No.(415) 568-3706

Alameda County
Health Care Services Agency
Department of Environmental Health
Hazardous Materials Division
800 Swan Way, Room 200
Oakland, CA 94621

Attn: Mr. Larry Seto/Ms. Susan Hugo

Re: Permit No. 592423
ARCO F/N 2035
1001 San Pablo Avenue
Albany, CA 94706

Dear Mr. Seto/Ms. Hugo,

This is to confirm our phone message that we are completing the piping and backfilling on 8-5-91. The line pressure test will be witnessed by the City of Albany Fire Department Inspector.

If you have any questions, please call.

Sincerely,

Walter F. Lewis

WFL/rr

cc: Mr. Ron Miles, ARCO

W. F. Lewis Construction, Inc.

FAX # (916) 372-6180

[illegible]

DATE [illegible] TIME [illegible]

TO: [illegible]

FROM: [illegible]

FAX No. [illegible]

NUMBER OF PAGES INCLUDING THIS ONE: [illegible]

Glide Avenue • West Sacramento, California 95691 • (916) 372-2755

W. F. Lewis Construction, Inc.

July 29, 1991

Alameda County
Health Care Services Agency
Department of Environmental Health
Hazardous Materials Division
80 Swan Way, Room 200
Oakland, CA 94621

ATTN: Mr. Larry Seto

RE: Permit No. 592423
ARCO F/N 2035
1001 San Pablo Ave
Albany, CA 94706

91 JUL 31 PM 2:54

Dear Mr. Seto,

This Letter is to confirm our schedule for completion of the piping and testing on wednesday, July 31, 1991, at the above mentioned job site.

If you have any questions, please call.

Sincerely,

Walter F. Lewis

WFL/rr

cc: Mr. Ron Miles, ARCO
Mr. Steve Straus, Applied Geo Systems

506 Glide Avenue • West Sacramento, California 95691 • (916) 372-2755
State Contractors License Number B-348937

Applied GeoSystems

91 JUL 29 AM 10:38

TRANSMITTAL

3315 Almaden Expressway, Suite 34
San Jose, California 95118
(408) 264-7723 FAX (408) 264-2435

TO: MR. LARRY SETO
ACHCSA-DEH
HAZARDOUS MATERIALS PROGRAM
80 SWAN WAY, ROOM 200
OAKLAND, CALIFORNIA 94621

FROM: JOEL COFFMAN
TITLE: PROJECT GEOLOGIST

DATE: 7/25/91
PROJECT NUMBER: AGS 69036.03
SUBJECT: ARCO STATION 2035, 1001 SAN PABLO AVENUE, ALBANY, CALIFORNIA

WE ARE SENDING YOU [XX] Attached [ ] Under separate cover via _____ the following items:

[ ] Shop drawings [ ] Prints [ ] Reports [ ] Specifications

[XX] Letters [ ] Change Orders [ ] _____

COPIES	DATED	NO.	DESCRIPTION
1	7/25/91		LETTER REGARDING LARRY SETO LETTER OF JULY 19, 1991, CONCERNING THE ABOVE SUBJECT SITE.

THESE ARE TRANSMITTED as checked below:

[ ] For review and comment [ ] Approved as submitted [ ] Resubmit ___ copies for approval

[ ] As requested [ ] Approved as noted [ ] Submit___ copies for distribution

[ ] For approval [ ] Return for corrections [ ] Return ___ corrected prints

[XX] For your files [ ] _____

REMARKS: cc: MR. CHUCK CARMEL, ARCO PRODUCTS COMPANY
MR. GIL JENSEN, ALAMEDA COUNTY DISTRICT ATTORNEY'S OFFICE
MR. LESTER FELDMAN, REGIONAL WATER QUALTIY CONTROL BOARD.

Copies: 1 to AGS project file no. 69036.03

SAN JOSE READER'S FILE

*Revision Date: 10/15/90
*File Name: TRANSMT.PRJ

Applied GeoSystems, Inc. 3315 Almaden Expressway, Suite 34, San Jose, CA 95118 (408) 264-7723

• FREMONT • IRVINE • BOSTON • SACRAMENTO • CULVER CITY • SAN JOSE

July 25, 1991
0725lset
AGS 69036.03

Mr. Larry Seto
Senior Hazardous Materials Specialist
Alameda County Health Care Services Agency
Department of Environmental Health
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, California 94621

Subject: Larry Seto Letter of July 19, 1991 concerning ARCO Station 2035, 1001 San Pablo Avenue, Albany, California.

Mr. Seto:

On behalf of ARCO Products Company (ARCO), I am pleased to inform you of the current status of the investigation/remediation plan at the subject site. The subsurface investigation at the subject site as described in our Work Plan for Subsurface Investigations and Remediation and Addendum One to Work Plan, dated April 29, 1991, will begin approximately two weeks after completion of tank and product-line replacement activities at the subject site. These tank and product-line replacement activities should be concluded by mid-August 1991. Work will proceed according to the preliminary time schedule included in this Addendum One to Work Plan. Subsequent investigation and remediation, as necessary, will proceed according to the preliminary time schedule included in the Work Plan for Subsurface Investigations and Remediation, previously submitted to your agency by RESNA/Applied GeoSystems. A copy of your letter to ARCO giving approval for the above-referenced work plan and addendum to work plan, dated May 28, 1991, is enclosed.

If you have any questions or comments regarding our proposed work or schedule, please call us at (408) 264-7723.

Sincerely,
RESNA/Applied GeoSystems

Steve Strausz
Steve Strausz
Assistant Project Geologist

Joel Coffman
Joel Coffman
Project Geologist

Enclosure: Copy of Work Plan Approval Letter

cc: Mr. Chuck Carmel, ARCO Products Company
Mr. Gil Jensen, Alameda County District Attorney's Office
Mr. Lester Feldman, Regional Water Quality Control Board

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

COPY

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

May 28, 1991

Mr. Chuck Carmel
Arco Products
P.O. Box 5811
San Mateo, CA 94402

Re: Arco Station #2035, 1001 San Pablo Avenue, Albany, CA.

Dear Mr. Christie:

I have reviewed your work plan for subsurface investigations and remediation dated April 29, 1991, that was prepared by Applied GeoSystems. It is acceptable. Please give me 48 hours prior notification before any work commences.

If you have any questions, please contact me at 271-4320.

Sincerely,

Larry Seto, Senior
Hazardous Materials Specialist

LS:sms

cc: Gil Jensen, Alameda County District Attorney, Consumer & Environmental Protection Agency
Charlene Williams, DOHS
RWQCB
Rafat Shahid, Assistant Agency Director, Environmental Health
Files

May 8, 1991

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

Certified Mailer: #P 367 604 437

July 19, 1991

Mr. Chuck Carmel
Arco Petroleum Products
P.O. Box 5811
San Mateo, Ca 94402

RE: Arco Station #2035, 1001 San Pablo Ave., Albany, Ca

Dear Mr. Carmel:

On July 19, 1991, I was informed by Steve Strausz of Applied Geo Systems that Arco has made the decision not to perform the work identified in the Remedial Action Plan, dated June 28, 1991, prepared by Applied Geo Systems. Specifically, the installation of cristy boxes and piping that would facilitate future installation of groundwater monitoring and soil vapor extraction wells.

I approved your new tank installation with the understanding that the site investigation and remediation will be performed in a timely manner.

Please submit to me within ten days of the receipt of this letter your current investigation/remediation plan with a time schedule.

If you have any questions, please contact me at 271-4320.

Sincerly,

Larry Seto
Senior Hazardous Materials Specialist

LS:lp

cc: Gil Jensen, Alameda County District Attorney's Office
RWQCB
Kyle Christie, Arco
Steve Strausz, Applied Geo Systems
Alabany Fire
Charlene Williams, DHS

LS

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.

Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. *(Extra charge)*
2. ☐ Restricted Delivery *(Extra charge)*

3. Article Addressed to:

Mr. Chuck Carroll
Arco Petroleum Products
PO Box 5811
San Mateo, Ca 94402

4. Article Number
P 367 604 437

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Address
X

6. Signature — Agent
X

7. Date of Delivery
JUL 24 1991

8. Addressee's Address *(ONLY if requested and fee paid)*

PS Form 3811, Mar. 1988 U.S.G.P.O. 1988-212-865 RETURN RECEIPT

P 367 604 437

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to Chuck Carroll	
Street and No. PO Box 5811	
P.O., State and ZIP Code San Mateo	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$
Postmark or Date 7/19/91	

☆U.S.G.P.O. 1989-234-555

PS Form 3800, June 1985

Applied GeoSystems, Inc. 3315 Almaden Expressway, Suite 34, San Jose, CA 95118 (408) 264-7723

• FREMONT • IRVINE • BOSTON • SACRAMENTO • CULVER CITY • SAN JOSE

July 16, 1991
0711lset
AGS 69036.03

Mr. Larry Seto
Alameda County Health Care Services Agency
Hazardous Materials Division
80 Swan Way, Room 200
Oakland, California 94621

Subject: Characterizing soils removed from new tank excavation for petroleum hydrocarbons at ARCO Station 2035, 1001 San Pablo Avenue, Albany, California.

Mr. Seto:

RESNA/Applied GeoSystems drilled two soil borings to approximate total depths of 21 feet and collected soil samples at intervals of 5 feet or less for laboratory analysis of total petroleum hydrocarbons as gasoline (TPHg), in accordance with California Department of Health Services regulations for subsurface investigations. In addition, as you requested during a meeting at the subject site on July 3, 1991, RESNA/Applied GeoSystems has performed the following work to characterize soils removed from the new tank excavation.

A total of approximately 800 cubic yards were removed from the new tank pit excavation on July 8 to 10, 1991. Approximately 350 cubic yards were used to backfill the former tank excavation onsite. The remainder was disposed of at Contra Costa County Landfill facility on Parr Road in Richmond, California.

RESNA/Applied GeoSystems collected 18 soil samples from each of 20 cubic yards of soil removed from the new tank excavation for use as backfill in the former tank excavations, and submitted the samples for same-day analysis of TPHg and the gasoline constituents benzene, toluene, ethylbenzene, and total xylenes (BTEX) at the Sequoia Analytical mobile laboratory onsite.

Please call us if you have any questions regarding this letter.

Sincerely,
RESNA/Applied GeoSystems

Steve Strausz
Assistant Project Geologist

cc: Chuck Carmel/ ARCO

July 15, 1991

Alameda County Department of Environmental Health
80 Swan Way
Oakland, California 94621

Attention: Mr. Rafat Shahid

ARCO Products Company Facilities in Alameda County - RWQCB Fuel Leaks List

Dear Mr. Shahid

Please find attached, Quarterly Summary Reports (QSRs) for ARCO Products Company Service Stations in Alameda County. The QSRs summarize activities conducted by ARCO at the respective sites during the second quarter of 1991; also included are projected site activities for the third quarter of 1991 and a bibliography of reports submitted for each location.

The QSRs are classified by address within the County. We are submitting this document and attached QSRs as agreed in our recent meeting with the RWQCB. Please note that we are forwarding copies of the QSRs to the RWQCB as well.

ARCO Products Company has reviewed the Regional Water Quality Control Board's (RWQCB) February 19, 1991 printout of ARCO fuel leak sites in the San Francisco Bay Area. We have evaluated each site with respect to ARCO's responsibility for investigation, monitoring, and/or remediation. It is ARCO's belief that several of the sites originally attributed to ARCO are actually the responsibility of other parties. We have therefore prepared QSRs and a brief discussion regarding those sites which we believe should either be removed from ARCO responsibility or be considered for closure.

ARCO is planning a subsequent comprehensive QSR submittal for ARCO sites on October 15, 1991. Please do not hesitate to contact us with any questions regarding this submittal.

Sincerely,

for Kyle A. Christie
Environmental Engineer

Attachments:
Non-ARCO Facility/Site Closure Discussion and QSRs
ARCO Facility QSRs

NON-ARCO FACILITY/SITE CLOSURE DISCUSSION AND QSRS

Alameda County

Alameda County Sites

Two ARCO facilities including Station Numbers 4977 and 6002 (located at 2770 Castro Valley Road, Castro Valley and 6235 Seminary Avenue, Oakland) experienced vapor/vent line failure during UST system precision testing. In accordance with State Water Resources Control Board (SWRCB) letter LG-43, ARCO requests that these facilities be removed from the RWQCB fuel leaks list.

A small volume of hydrocarbons were released from ARCO Station Number 498 located at 286 South Livermore Avenue, Livermore. The product was released to an on-site secondary containment trench and was subsequently removed; no product was released to the soil or groundwater. Alameda County issued a letter to ARCO on May 24, 1991 stating that no further action is necessary at this site.

A total of seven Alameda County ARCO facilities listed by the RWQCB were not ARCO-owned at the time of the release discovery and/or report. These sites include Station Numbers 188, 329, and 623 (respectively located at 4191 First Street, Pleasanton, 2032 12th Street, Oakland, and 2110 Mountain, Oakland) and facilities located at 2951 High Street, 4401 Market Street, 2844 Mountain Boulevard, and 2740 98th Street, Oakland.

ARCO has prepared QSRs for each of these facilities; however, we request that the cases be omitted from the leaks list or be referred to the actual responsible party, as appropriate. The ownership information for the individual sites is included on the attached QSRs.

Finally, the RWQCB February 19, 1991 printout lists two sites which are actually the same. The facility listed as 71 MacArthur Boulevard is actually ARCO Service Station Number 4931 located at 731 West MacArthur Boulevard in Oakland.

Attachment:
Non-ARCO Facility QSRs

UST LEAK SITE UPDATE

Date of Last Review/Update: April 15, 1991

Current Date: July 15, 1991

SITE IDENTIFICATION

Name: ARCO Service Station 2035

Case No.:

Address: 1001 San Pable Avenue
Street Number / Street

Albany
City

94706
ZIP Code

County: Alameda

Substance: Gasoline

Local Agency: Alameda County Health Care Services Agency

Regional Board: Regional Water Quality Control Board - San Francisco Bay Area

LEAD STAFF PERSON

ACHCSA - Larry Seto

CASE TYPE

_____ Undetermined _____ Soil Only _____ Ground Water _____ Drinking Water

STATUS (Date indicates when case moved into status)

_____	No Action Taken	
_____	Leak Being Confirmed	Date _____
_____	Preliminary Site Assessment Workplan Submitted	Date _____
_____	Preliminary Site Assessment Underway	Date _____
_____	Pollution Characterization	Date _____
_____	Remediation Plan	Date _____
_____	Remedial Action Underway	Date _____
_____	Post Remedial Action Monitoring	Date _____
_____	Case Referred to Regional Board	Date _____
_____	Case Referred to Dept. of Health Services	Date _____
_____	Case Closed	Date _____

REMEDIAL ACTIONS

Underground storage tanks scheduled for replacement July 1991.

COMMENTS

In January 1990, a preliminary envionmental site assessment report was submitted to the regulatory agencies summarizing the results of soil sampling from 5 borings at the site, prior to ARCO's planned tank removal activities. ARCO plans to replace the UST's at the site in 1991 and perform an investigation of the extent of hydrocarbon impacted soil during and after tank replacement activities are complete.

ARCO submitted Work Plan for a subsurface investigation at the site April 29, 1991; will be implemented following tank replacement.

Please refer to the attached page for a listing of previously submitted reports which document site history.

RESPONSIBLE PARTY IDENTIFICATION (Only if newly discovered or changed)

Name

Contact

Phone ( )

Address
Street Number / Street

City / State / ZIP Code

REPORT	DATE	CONSULTANT
Limited Environmental Site Assessment AGS 69036-1	1/24/90	Applied GeoSystems
Work Plan for Subsurface Investigation and Remediation and Addendum One to Work Plan (AGS 69036-2).	4/29/91	RESNA/Applied GeoSystems

W. F. Lewis Construction, Inc.

Fax #(916) 372-6180

July 6, 1991

Alameda County
Health Care Services Agency
Department of Environmental Health
Hazardous Materials Division
80 Swan Way, Room 200
Oakland, CA 94621

91 JUL -9 AM 9:07

Attn: Mr. Larry Seto - Project Specialist

Re: Underground Tank Work
ARCO AM/PM market F/N 2035
1001 San Pablo Avenue @ Marin
Albany, CA 94706

Dear Mr. Seto,

This letter is in response to our job site meeting on 7/03/91 and is to confirm and update the job plan. The work to be addressed is as follows:

Old Tanks

. The old tanks were removed on 7/03/91 and hauled off by Erickson, Inc.

. The material accessible in the bottom of the hole was removed and stockpiled as directed.

New Tanks

. We are proceeding with the excavation of the new tank hole on 7/08/91 and the installation of the new tanks on 7/12/91.

. Because of the close proximity to the adjoining building and the confined space between the existing building when this hole is excavated the new tanks must be set immediately.

. We are hauling the soil excavated to the West Contra Costa County Sanitary Landfill and are relying on the soil testing done by Applied GeoSystems indicating clean soil. To the best of our knowledge this area is not contaminated.

. The soil excavation is to be monitored by Applied GeoSystems and if any soil uncovered is suspect it will be stockpiled for future testing.

506 Glide Avenue • West Sacramento, California 95691 • (916) 372-2755
State Contractors License Number B-348937

W. F. Lewis Construction, Inc.

. We are relying on Applied GeoSystems confirmation that the water table is at 17 -18 feet below grade and expect a dry hole condition. The tanks will be set two feet apart per ARCO specifications which exceed the manufactures requirements of 18" minimum (see enclosed specifications).

. Should water be found above fifteen feet it is anticipated that it will be pumped out and the tanks will be set per dry hole condition specifications.

Old Pipe Lines

. The old pipe lines will be removed and the soil in the trenches tested every 20'0" as directed.

. Over excavation is not expected.

New Pipe Lines

. The new system will be installed using Ameron UL listed alcohol pipe. The system will be double wall product and single wall vent and vapor pipe.

. The dispenser piping will be hard piped without bravo boxes per plans.

We appreciate your help at the site on Friday 7/03/91 and understand that you will visit the site Wednesday or Thursday of next week.

Enclosed are the submittal/specifications when used in conjunction with ARCO plans and specifications this information should describe the complete installation.

We will look forward to seeing you at the site and if you should have any questions please call us.

Sincerely,

Walter F. Lewis

Enclosures;
Xerxes Tank Installation Manual
Ameron Piping System
Pomeco Spill Containment

cc
Ron Miles - ARCO
Chuck Carmel - ARCO
Joel Coffman/ Steve Straus - Applied GeoSystems

506 Glide Avenue • West Sacramento, California 95691 • (916) 372-2755
State Contractors License Number B-348937

W. F. Lewis Construction, Inc.

June 26, 1991

Alameda County
Health Care Services Agency
Department of Environmental Health
Hazardous Materials Division
80 Swan Way, Room 200
Oakland, CA 94621

91 JUN 27 PM 4:16

Attn: Mr. Larry Seto - Project Specialist

Re: Under ground tank work
ARCO AM/PM market F/N 2035
1001 San Pablo Avenue @ Marin
Albany, CA 94706
Application number: 592423

Dear Mr. Seto,

This letter is in regards to the tank work at the ARCO AM/PM at 1001 San Pablo Avenue, Albany CA. I understand that Mr. Joel Coffman of Applied GeoSystems has been in contact with you about scheduling. Our understanding of the work plan is to begin by removing the concrete and asphalt over the old tanks and hauling it to a non regulated dump. This work will take place on Monday 7-01-91. Next the soil over the existing tank will be excavated and stockpiled on the site. This is planned for Tuesday 7-02-91. On Wednesday 7-03-91 the existing tanks will be pulled and hauled by Erickson Inc. to their yard. Soil samples will be taken from the old tank hole and the results of these samples will determine the procedures for the excavation of the new tank hole.

Also I want to provide the following information updating the underground tank closure plan.

. Item 6
Contractor: W.F. Lewis Construction Inc.
Address: 506 Glide Ave
City: West Sacramento, CA 95691
License Type: B/C61/40
License No.: 348937
Tax Id #: 94-2440459
Phone No: (916)372-2755

. Item 10 Hazardous Waste Transporter
Name: Erickson Inc.
EPA I.D. No: CAD009466392
Hauler No: 019
License Exp: 5-1-92
Address: 255 Parr Blvd.
City: Richmond, CA 94801

W. F. Lewis Construction, Inc.

. Item 11 Sample Collector

Name:	Joel Coffman/Steve Straus/Lou Leet
Company:	Applied GeoSystems
Address:	3315 Almaden Express Way, Suite #34
City:	San Jose, CA 95118
Phone No.:	(408)264-7723

. Item 12 Laboratory

Name:	Sequoia Analytical
Address:	680 Chesapeake Drive
City:	Redwood City, CA 94063
Cert. No.:	1210

We are looking forward to meeting you on the job and are ready to answer any questions that you might have.

Sincerely

Walter F. Lewis
W.F. Lewis Construction Inc.

WFL/rr

cc: Mr. Ron Miles - ARCO
Mr. Chuck Carmel - ARCO
Mr. Joel Coffman - Applied GeoSystems

Applied GeoSystems, Inc. 3315 Almaden Expressway, Suite 34, San Jose, CA 95118 (408) 264-7723

• FREMONT • IRVINE • BOSTON • SACRAMENTO • CULVER CITY • SAN JOSE

June 21, 1991
0620seto
AGS 69036.03

Mr. Larry Seto
Alameda County Health Care Services Agency
80 Swan Way, Room 200
Oakland, California 94621

Subject: Tank removal and replacement at ARCO Station 2035, 1001 San Pablo Avenue, Albany, California.

Dear Mr. Seto:

This letter is to confirm our telephone conversation on June 20, 1991 regarding the tank removal and replacement at the subject site. We understand from ARCO Products Company (ARCO) that tank replacement activity is scheduled to begin July 1, 1991. I understand from our telephone conversation you wish to be present at the site when the tanks are removed. At this time, the tank removal is scheduled to take place on approximately July 3, 1991.

ARCO has requested that RESNA/Applied GeoSystems (AGS) drill two soil borings to first encountered ground water in the proposed new tank pit area prior to tank replacement at the site. This work is scheduled for June 25, 1991. Soil samples from these borings will be laboratory analyzed to determine if soils in this area have been impacted by gasoline hydrocarbons. If laboratory analyses indicate that these soils in the new tank pit area are not impacted by gasoline hydrocarbons, ARCO would like to use the soil excavated from the new tank pit location for backfill material in the former tank pit. Results of laboratory analyses performed on soil samples collected from the new tank pit area will be available for your inspection at the site prior to excavation of the new tank pit. We will notify you if a change occurs in the tank replacement schedule.

Please call us if you have any questions at (408) 264-7723.

Sincerely,
RESNA/Applied GeoSystems

Joel Coffman
Assistant Project Geologist

cc: Chuck Carmel, ARCO

Applied GeoSystems

3315 Almaden Expressway, Suite 34
San Jose, California 95118
(408) 264-7723 FAX (408) 264-2435

91 JUN 24 PM 1:19

TRANSMITTAL

TO: MR. LARRY SETO
ALAMEDA COUNTY HEALTH CARE
SERVICES AGENCY
80 SWAN WAY, ROOM 200
OAKLAND, CALIFORNIA 94621

FROM: JOEL COFFMAN
TITLE: ASST. PROJECT GEOLOGIST

DATE: 6/21/91
PROJECT NUMBER: AGS 69036.03
SUBJECT: ARCO STATION 2035, 1001 SAN PABLO AVENUE, ALBANY, CALIFORNIA

WE ARE SENDING YOU [X] Attached [ ] Under separate cover via _____ the following items:

[ ] Shop drawings [ ] Prints [ ] Reports [ ] Specifications

[X] Letters [ ] Change Orders [ ] _____

COPIES	DATED	NO.	DESCRIPTION
1	6/21/91		LETTER REGARDING TANK REMOCAL AND REPLACEMENT AT THE ABOVE SUBJECT SITE.

THESE ARE TRANSMITTED as checked below:

[ ] For review and comment [ ] Approved as submitted [ ] Resubmit ___ copies for approval

[ ] As requested [ ] Approved as noted [ ] Submit___ copies for distribution

[ ] For approval [ ] Return for corrections [ ] Return ___ corrected prints

[X] For your files [ ] _____

REMARKS: _____

Copies: 1 to AGS project file no. 69036.03

SAN JOSE READER'S FILE

*Revision Date: 10/15/90
*File Name: TRANSMT.PRJ

Applied GeoSystems

3315 Almaden Expressway, Suite 34
San Jose, California 95118
(408) 264-7723 FAX (408) 264-2435

91 JUN -4 AM 10:50

TRANSMITTAL

TO: MR. LARRY SETO
ACHCSA
80 SWAN WAY, ROOM 200
OAKLAND CA 94621

DATE: 5/31/91
PROJECT NUMBER: 69036.02
SUBJECT: TELEPHONE CONVERSATION

FROM: JOEL COFFMAN
TITLE: ASST. PROJECT GEOLOGIST

WE ARE SENDING YOU [xx] Attached [ ] Under separate cover via _____ the following items:

[ ] Shop drawings [ ] Prints [ ] Reports [ ] Specifications

[xx] Letters [ ] Change Orders [ ] _____

COPIES	DATED	NO.	DESCRIPTION
1	5/31/91	69036.02	TELEPHONE CONSERVATION CONCERNING FUTURE ENVIRONMENTAL WORK AT ARCO STATION 2035, 1001 SAN PABLO AVENUE, ALBANY, CA.

THESE ARE TRANSMITTED as checked below:

[ ] For review and comment [ ] Approved as submitted [ ] Resubmit ___ copies for approval

[ ] As requested [ ] Approved as noted [ ] Submit___ copies for distribution

[ ] For approval [ ] Return for corrections [ ] Return ___ corrected prints

[ ] For your files [ ] _____

REMARKS: _____

Copies: 1 to AGS project file no. 69036.02

SAN JOSE READER'S FILE

*Revision Date: 10/15/90

CC: CHUCK CARMEL (ARCO PRODUCTS COMPANY)

*File Name: TRANSMT.PRJ

Applied GeoSystems, Inc. 3315 Almaden Expressway, Suite 34, San Jose, CA 95118 (408) 264-7723

• FREMONT • IRVINE • BOSTON • SACRAMENTO • CULVER CITY • SAN JOSE

May 31, 1991
0529seto
AGS 69036.02

Mr. Larry Seto
Alameda County Health Care Services Agency
80 Swan Way, Room 200
Oakland, California 94621

Subject: Telephone conversation concerning future environmental work at ARCO Station 2035, 1001 San Pablo Avenue, Albany, California.

Dear Mr. Seto:

This letter is to confirm our telephone conversation on May 28, 1991 concerning future work proposed at the subject site. Our records indicate that on May 3, 1991, you verbally approved the investigation and remediation Work Plan and Addendum One to Work Plan (Applied GeoSystems April 29, 1991). We understand also that a letter from you would be sent to ARCO and Applied GeoSystems confirming approval; however, as of the date of this letter, we have not received written approval. We also understand on May 15, 1991, that ARCO was granted approval for planned tank removal and replacement at the site.

As discussed and verbally agreed upon during our May 28, 1991 telephone conversation, we will not initiate the environmental investigation and remediation phase of the work until the tanks are replaced (if this is done within a reasonable amount of time) at the site. This would prevent new ground-water monitoring wells from being destroyed in the excavation activities associated with tank replacement.

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

May 28, 1991

Mr. Chuck Carmel
Arco Products
P.O. Box 5811
San Mateo, CA 94402

Re: Arco Station #2035, 1001 San Pablo Avenue, Albany, CA.

Dear Mr. Christie:

I have reviewed your work plan for subsurface investigations and remediation dated April 29, 1991, that was prepared by Applied GeoSystems. It is acceptable. Please give me 48 hours prior notification before any work commences.

If you have any questions, please contact me at 271-4320.

Sincerely,

Larry Seto, Senior
Hazardous Materials Specialist

LS:sms

cc: Gil Jensen, Alameda County District Attorney, Consumer & Environmental Protection Agency
Charlene Williams, DOHS
RWQCB
Rafat Shahid, Assistant Agency Director, Environmental Health
Files

May 8, 1991

Fac No 2035

I

592423
1,074.00
5/1/91

R
592423
1,074.00
5/1/91

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH
HAZARDOUS MATERIALS DIVISION
80 SWAN WAY, ROOM 200
OAKLAND, CA 94621
PHONE NO. 415/271-4320

Project Specialist (print) Larry Seto

5-15-91 Wrote additional requirements to Hours # 15 and #16. C.S.

Contact Paul Welton

Carry Seto
538-7367

ACCEPTED
DEPARTMENT OF ENVIRONMENTAL HEALTH
470 - 27th Street, Third Floor
Oakland, CA 94612
Telephone: (415) 874-7237

These plans have been reviewed and found to be acceptable and essentially meet the requirements of State and local health laws. Changes to your plans indicated by the Department are to assure compliance with State and local laws. The project proposed herein is now reviewed for its use of any required building permits for construction.

One copy of these accepted plans must be on the job site available to all contractors and craftsmen involved with removal.

Any changes or alterations of these plans and specifications must be submitted to this Department and to the City Building Inspection Department to determine if additional plans meet the requirements of State and local laws. Unless this Department is notified at least 48 hours prior to the following required inspections:

_____ Removal of Tank and Piping
_____ Sampling
_____ Final Inspection

the issuance of a permit to operate is dependent upon compliance with accepted plans and all applicable laws.

UNDERGROUND TANK CLOSURE PLAN
*** * * Complete according to attached instructions * * ***

1. **Business Name** ARCO AM/PM Mini-Market
   Business Owner Atlantic Richfield Company
2. **Site Address** 1001 San Pablo Avenue at Marin
   City Albany **Zip** 94706 **Phone** 415-525-1362
3. **Mailing Address** same
   City _____ **Zip** _____ **Phone** _____
4. **Land Owner** Atlantic Richfield Company
   Address 2000 Alameda de las Pulgas **City, State** San Mateo, CA **Zip** 94403
5. **Generator name under which tank will be manifested** _____
   Atlantic Richfield Company
   EPA I.D. No. under which tank will be manifested CAL000028626

rev 12/90

6. Contractor Gettler Ryan

Address 2150 West Winton Avenue

City Hayward, CA 94545 Phone 415-783-7500

License Type B/C61/D40 ID# 94-155-1136

7. Consultant Barghausen Consulting Engineers

Address 4612 Roseville Road, Suite 103

City North Highlands, CA 995660 Phone 916-348-3057

8. Contact Person for Investigation

Name Paul Wilton Title Design Engineer

Phone 916-348-3057

9. Number of tanks being closed under this plan 4

Length of piping being removed under this plan 120' x 4 pipes

Total number of tanks at facility 4

10. State Registered Hazardous Waste Transporters/Facilities (see instructions).

** Underground tanks are hazardous waste and must be handled ** as hazardous waste

a) Product/Residual Sludge/Rinsate Transporter

Name H&H Ship Service Co. EPA I.D. No. CAD 004771168

Hauler License No. 0334 License Exp. Date 1-31-92

Address 220 China Basin Street

City San Francisco State CA Zip 94107

b) Product/Residual Sludge/Rinsate Disposal Site

Name same as above EPA I.D. No. _____

Address _____

City _____ State _____ Zip _____

rev 12/90

c) Tank and Piping Transporter

Name same as above EPA I.D. No. _____

Hauler License No. _____ License Exp. Date _____

Address _____

City _____ State _____ Zip _____

d) Tank and Piping Disposal Site

Name same as above EPA I.D. No. _____

Address _____

City _____ State _____ Zip _____

11. Experienced Sample Collector

Name Dave Byron

Company Gettler Ryan Inc.

Address 2150 Winton Avenue

City Hayward State CA Zip 94545 Phone 415-783-7500

12. Laboratory

Name IT Analytical Labs

Address 2055 Junction Avenue

City San Jose State CA Zip 95030

State Certification No. 137

13. Have tanks or pipes leaked in the past? Yes [ ] No [ ]

If yes, describe. UNKNOWN

14. Describe methods to be used for rendering tank inert

dry ice

Before tanks are pumped out and inerted, all associated piping must be flushed out into the tanks. All accessible associated piping must then be removed. Inaccessible piping must be plugged.

The Bay Area Air Quality Management District (771-6000), along with local Fire and Building Departments, must also be contacted for tank removal permits. Fire departments typically require the use of explosion proof combustible gas meters to verify tank inertness. **It is the contractor's responsibility to bring a working combustible gas meter on site to verify tank inertness.**

15. Tank History and Sampling Information

Tank		Material to be sampled (tank contents, soil, ground-water, etc.)	Location and Depth of Samples
Capacity	Use History (see instructions)		
UNL. 10,000 GAL.	INSTALLED 5-72	WATER	* SEE ATTACHED SOIL SAMPLING METHODS
REG. 6,000 GAL.	" 7-64	OIL	
SUP. 4,000 GAL.	" 7-64	SLUDGE	
SUP. 4,000 GAL.	" 7-64	SOIL	
		Soil and ground water is present.	At both ends of the tank at the soil/backfill interface into 2' of native soil

One soil sample must be collected for every 20 feet of piping that is removed. A ground water sample must be collected should any ground water be present in the excavation.

Excavated/Stockpiled Soil	
Stockpiled Soil Volume (Estimated)	Sampling Plan J.K.

Stockpiled soil must be placed on bermed plastic and must be completely covered by plastic sheeting.

16. Chemical methods and associated detection limits to be used for analyzing samples

    The Tri-Regional Board recommended minimum verification analyses and practical quantitation reporting limits should be followed. See attached Table 2.

Contaminant Sought	EPA, DHS, or Other Sample Preparation Method Number	EPA, DHS, or Other Analysis Method Number	Method Detection Limit
~~Gas~~ TPH (G) BTXE Organic Lead			

17. Submit Site Health and Safety Plan (See Instructions)

18. Submit Worker's Compensation Certificate copy

Name of Insurer Republic Indemnity

19. Submit Plot Plan (See Instructions)

20. Enclose Deposit (See Instructions)

21. **Report any leaks or contamination to this office within 5 days of discovery.** The report shall be made on an Underground Storage Tank Unauthorized Leak/Contamination Site Report form. (see Instructions)

22. Submit a closure report to this office within 60 days of the tank removal. This report must contain all the information listed in item 22 of the instructions.

I declare that to the best of my knowledge and belief the statements and information provided above are correct and true.

I understand that information in addition to that provided above may be needed in order to obtain an approval from the Department of Environmental Health and that no work is to begin on this project until this plan is approved.

I understand that any changes in design, materials or equipment will void this plan if prior approval is not obtained.

I understand that all work performed during this project will be done in compliance with all applicable OSHA (Occupational Safety and Health Administration) requirements concerning personnel health and safety. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that this responsibility is not shared nor assumed by the County of Alameda.

Once I have received my stamped, accepted closure plan, I will contact the project Hazardous Materials Specialist at least three working days in advance of site work to schedule the required inspections.

Signature of Contractor

Name (please type) David Byron -- Gettler Ryan

Signature David Byron

Date 4/25/91

Signature of Site Owner or Operator

Name (please type) Ron Knutson -- Atlantic Richfield Company

Signature

Date 4/25/91

rev 12/90

CERTIFICATE OF INSURANCE

ISSUE DATE (MM/DD/YY): 04/24/91

PRODUCER

Woodruff-Sawyer & Co.
220 Bush Street
7th Floor
San Francisco, CA 94104

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURED

Gettler-Ryan Incorporated
2150 West Winton Avenue
Hayward, CA 94545-1787

COMPANIES AFFORDING COVERAGE

COMPANY LETTER A	Republic Indemnity
COMPANY LETTER B	
COMPANY LETTER C	
COMPANY LETTER D	
COMPANY LETTER E	

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	ALL LIMITS IN THOUSANDS
	GENERAL LIABILITY COMMERCIAL GENERAL LIABILITY CLAIMS MADE / OCCUR. OWNER'S & CONTRACTOR'S PROT				GENERAL AGGREGATE $ PRODUCTS-COMP/OPS AGGREGATE $ PERSONAL & ADVERTISING INJURY $ EACH OCCURRENCE $ FIRE DAMAGE (Any one fire) $ MEDICAL EXPENSE (Any one person) $
	AUTOMOBILE LIABILITY ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS HIRED AUTOS NON-OWNED AUTOS GARAGE LIABILITY				COMBINED SINGLE LIMIT $ BODILY INJURY (Per person) $ BODILY INJURY (Per accident) $ PROPERTY DAMAGE $
	EXCESS LIABILITY OTHER THAN UMBRELLA FORM				EACH OCCURRENCE $ / AGGREGATE $
A	WORKER'S COMPENSATION AND EMPLOYERS' LIABILITY	PC941426	04/01/91	04/01/92	STATUTORY $ 1,000 (EACH ACCIDENT) $ 1,000 (DISEASE—POLICY LIMIT) $ 1,000 (DISEASE—EACH EMPLOYEE)
	OTHER				

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS

RE: Facility #2035 - 1001 San Pablo Ave., Albany, CA.

CERTIFICATE HOLDER

County of Alameda, Dept.
of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 10 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

BARGHAUSEN CONSULTING ENGINEERS, INC.

Land Planning, Survey and Design Specialists
FACSIMILE TRANSMITTAL

JOB NO. 3297

TO: Mr. Larry Seto
FROM: Paul Witten

FAX NO: 415-568-3726

RE: Larry - please find attached the correct specification for the Xerxes double wall fiberglass tanks proposal for the new facility @ 1001 San Pablo Ave. If you have any questions, please call.

Paul Witten

CC:

NO. PAGES INCLUDING COVER SHEET: 2
DATE/TIME: 10:42 6/25/91

NOTE: IF YOU DO NOT RECEIVE THE NUMBER OF PAGES STATED, PLEASE CONTACT Paul AT (916) 348-3057

HOME OFFICE FAX NO. (206) 251-8782

CALIFORNIA OFFICE FAX NO. (916) 348-0953

Home Office: 18215 72nd Avenue South • Kent, Washington 98032 • (206) 251-6222 • Fax (206) 251-8782
FROM. BCE L. CAL 1 5' Sprrville Road, Suite #103 • North Highlands, California 95660 • (916) 348-3057 • Fax (916) 348-0953

UNDERGROUND STORAGE TANK

CLOSURE SPECIFICATIONS

Prepared by

Barghausen Consulting Engineers, Inc.
for

ATLANTIC RICHFIELD COMPANY

FAC. NO. 2035 ADDRESS: ALBANY - 1001 SAN PABLO

1. SCOPE

When Drawings indicate that existing underground tanks are to be removed or abandoned, the Contractor is to do so according to the following instructions.

2. GENERAL

Before starting, check municipal ordinances and regulations of the state or governing bodies pertaining to underground storage tanks. These specifications are to be complied with as minimum requirements. Contractor is to obtain and pay for any necessary permits (unless ARCO has previously obtained them).

3. REMOVAL TO ANOTHER PROPERTY OR FOR SCRAP AS DIRECTED BY ARCO ENGINEER

a. Disconnect and remove the suction, inlet, gauge and vent lines. Remove underwriter's labels and give to owner's engineer.

b. Remove all product from the connecting lines and tank, flushing with water back to the tank. Use a vacuum truck or if unavailable, a hand pump, to remove the product remaining in the tank below all tank openings. Take precautions to prevent spilling even the smallest amount of product. All product removed from tank is to be disposed of by putting it into an active tank for the same kind of product, any sludge removed shall be disposed of as a hazardous waste according to regulations.

c. Use all precautions against fire or flash of product vapors while working on the tank. Ground air movers to the tank or if fiberglass install an 8' ground rod in soil (not pea gravel) near the tank.

d. Before starting work the Contractor should obtain a copy of "Cleaning, Petroleum Storage Tanks" publication RD 2015, published

by American Petroleum Institute, 2101 "L" Street N.W., Washington, DC 20037. The following is an outline for bid purposes:

Gas free the tank by ventilating it with fresh air. Use an air mover (grounded) with a hose attached. If the tank has large openings a hose may (grounded) not be necessary; however, the air mover must be of the type that cannot provide an ignition source, since the vapor-air combination must go through the flammable range before becoming safe. The air mover must be electrically bonded to the tank. To minimize the hazard of going through the flammable range the tank can first be purged with an inert gas, then ventilated with air. Using dry ice (which dissolves into carbon dioxide) is a common method. The dry ice is broken up and distributed throughout the tank as much as possible.

Approximately 10 lbs. of dry ice per 1,000 gallons (some jurisdictions may require 15 lbs) will be required. Some jurisdictions will allow a tank to be transported if all openings are closed soon after the dry ice is introduced. First the amount of oxygen should be checked by an appropriate oxygen indicator. In most instances, however, the tank should be purged with air as described until the vapors are well within the non-combustible range as indicated by a combustible gas indicator.

e. Cap or plug all inlets and outlets. One plug or cap must contain a ⅛-inch hole to permit the tank to breathe.

f. Transport to the designated location in accordance with local regulations. The local fire department(s) should be notified when the tank(s) are to be transported, and of the planned route.

g. Tank should be stored only on supervised property.

h. Tanks must be kept capped or plugged while in storage and must be plainly marked "NOT GAS FREE." Mechanical repairs, welding or boring must not be done on these tanks (even though once "Gas Free," vapors will return in a certain length of time).

i. Tanks being removed for scrap or use by others will become the property of the contractor who will be given a bill or sale by owner's engineer. They are the contractor's property and responsibility.

4. ABANDON IN PLACE <SECTION NOT APPLICABLE>

5. When the tank is removed the Contractor shall provide to the owner a document stating that the tank has been removed, where it was transported to, eventual method of disposal or re-use and name of the person or firm responsible for disposal or who is the re-use it. The method of disposal must be in accordance with all applicable regulations. The document is to be one approved by the Owner and all authorities having jurisdiction. The Owner will send this document to the appropriate local agency. When the tank is re-used, the document will state the new Owner, the new location, and the type of use.

6. If the tank is abandoned, a similar document is to be provided to Owner for filing with the appropriate permitting agency. This document must be acceptable to Owner and the governmental agency. The Owner will also place a notice on the deed to the property describing the location, size and depth or burial of the tank, the type of product it contained and the material with which it was filled.

7. The Contractor will take soil samples in the vicinity of the tank being abandoned or removed when requested by Owner. Owner will require these unless it can be otherwise demonstrated that no unauthorized release (or leak) has occurred. The samples are to be taken in accordance with local regulations. The samples will be turned over to the Owner to be analyzed.

8. All product and sludge removed from any tank shall be disposed of by:

   a. putting product into an active tank for the same kind of product.

   b. sludge is to be taken to a hazardous waste site and disposed of according to regulations.

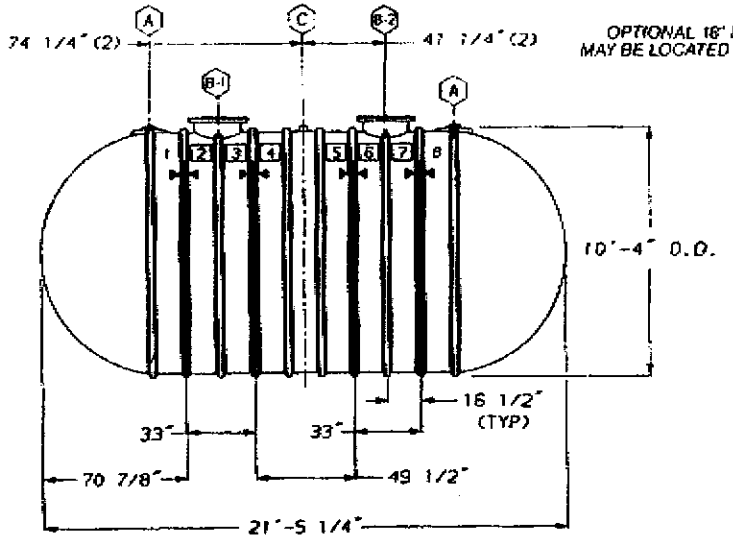
SOIL SAMPLING METHODS

Sampling will be conducted in accordance with the following three regulatory documents: (1) Regional Board Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks, Tri-Regional Recommendations (California Regional Water Quality Control Board [CRWQCB] May 1989); (2) Regional Board Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks, Tri-Regional Recommendations, Appendix A: Central Valley Regional Board Reporting Requirements (CRWQCB, April 1989); and (3) Leaking Underground Fuel Tank (LUFT) Field Manual: Guidelines for Site Assessment, Cleanup, and Underground Storage Tank Closure (CRWQCB, October 1989). A letter of acknowledgment and a signed Authorization to Release Analytical Data form is included as an attachment to this letter.

During sampling, the geologist will use a PID to characterize the relative levels of hydrocarbons in the soil and note any subjective evidence of hydrocarbons such as obvious product odor and discoloration. Field instruments such as the PID are useful for indicating relative levels of hydrocarbon vapors, but do not detect the concentration of hydrocarbons present with the same precision as laboratory analyses.

During sampling, the soil will be brought to the ground surface in an excavator bucket, and the outer soil will be scraped away. A clean, 6-inch-long, 2 1/2 inch-diameter, clear brass tube will be driven into the soil using a percussion sampler. The brass tube will be removed and the ends covered with aluminum foil and plastic end caps and taped. The tube will be labeled and immediately placed on ice for transport to the laboratory. Chain of Custody Records will be maintained throughout delivery to the laboratory.

Soil samples will also be collected from the stockpiled soil to evaluate treatment and disposal options. Four soil samples will be collected for every 50 cubic yards of stockpiled soil. Each group of four samples will be composited into one sample by the laboratory. Soil samples will be collected in clean brass tubes from approximately 18 inches below the surface of the stockpiles.



OPTIONAL 16" DIAMETER RESERVOIR MAY BE LOCATED ON THE CENTER OF TANK.

DWT - II
10 FT. DIA. 10,000 GAL. T-32 DOUBLE WALL

A. Acceptable Manufacturer: XERXES CORPORATION

B. Governing Standards:

1. ASTM standard document number D4021.
2. Underwriters Laboratories, Inc. (U.L.) Standard for Safety 1316, File MH 9061 for storage of flammable liquids. A U.L. certification plate shall be attached to each tank.
3. National Fire Protection Association:
   Flammable and Combustible Liquids Code (NFPA 30)
   Automotive and Marine Service Station Code (NFPA 30A)
   Standard for Installation of Oil Burning Equipment (NFPA 31).
4. National Sanitation Foundation, Standard 14. (Optional)
5. Factory Mutual Systems approval Factory Mutual Double Wall J.I. IM7A0. AE
6. Military Specification No. MIL-T-52777.
7. City of New York Department of Buildings, M.E.A. Division number MEA-161-89-M

Tanks shall be tested and installed in accordance with Xerxes' current specifications and published installation instructions.

SYMBOL IDENTIFICATION
(for detail views, see accessory pages)

- (A) 4" NPT Monitor Fitting
- (B-1) 22" Dia. Manway with 3-4" NPT Fittings in line
- (B-2) 22" Dia. Manway with 3-4" NPT Fittings in triangular pattern.
- (C) Lift lug
- Optional through-the-wall fitting location
- Hold down strap location (straps optional)

Deflector plates under all manways and service fittings.

Optional accessories
(see accessory pages for appropriate letter)

Letter	Location	Description

NOTES

CUSTOMER		
DESTINATION LOCATION		
PROJECT NAME		
CONSULTING ENGINEER		
RECOMMENDED SERVICE		
QUANTITY	CUSTOMER P.O. NUMBER	
MODEL NO. SIZE 10'-10,000	ACTUAL CAPACITY 10,370 Gal.	APPROX. WT. 4,170 #
PREPARED BY		PHONE NO.

XERXES® CORPORATION

T-32

SITE, HEALTH, AND SAFETY PLAN

GENERAL INFORMATION

SITE: Company: Arco - 2035
Location: 1001 San Pablo Ave.
City: Albany

PLAN PREPARED BY: Barghausen Consulting Engineers DATE: _____

OBJECTIVES: To provide a Site, Health, and Safety Plan for the safe completion of the site work.

PROPOSED DATE OF SITE WORK: Upon receipt of permits to perform the work.

DOCUMENTATION/SUMMARY: Hazardous material may be present, caution is advised.

SITE WASTE CHARACTERISTICS

WASTE TYPES(S): Liquid Solid

CHARACTERISTIC(S): Volatile Flammable Toxic

FACILITY DESCRIPTION: Gasoline service station with underground utilities.

STATUS: Active

HAZARD EVALUATION

PARAMETER: TLV 300 ppm HEALTH: ingestion, inhalation, absorption

LEL 10% Gastechtor max.

SPECIAL PRECAUTIONS AND COMMENTS: No special precautions are expected to be needed. Confined space entry is not anticipated.

SITE SAFETY WORKPLAN: Work to be performed in accordance with sections 9.1 and 9.6 of the Barghausen Consulting Engineers Site Health and Safety Plan and per plan specifications.

PERIMETER ESTABLISHED: Lot to be fenced on all four sides.

PERSONNEL PROTECTION: Level of Protection EPA Level D

Modifications: None

Surveillance Equipment & Materials: Gastechtor or equivalent on site during tank removal.

SITE ENTRY PROCEDURES: As per section 9.1 of the Safety Plan.

DECONTAMINATION PROCEDURES: Personal: Wash thoroughly with detergent solution and water.

Equipment: Steam cleaning if needed.

FIRST AID: As applicable

WORK LIMITATIONS: (time of day, weather, heat/cold stress): as permitted

INVESTIGATION-DERIVED-MATERIAL DISPOSAL:

Soils and groundwater will be contained on site. Disposal method will be determined upon receipt of analytical results.

TEAM COMPOSITION: Field Superintendent: _____ will conduct pre-job site safety briefing with all personnel

Field Foreman: _____ will act as the Site Safety Officer

All employees are responsible for the safe and proper completion of the project.

EMERGENCY INFORMATION:

LOCAL RESOURCES:

Ambulance/Hospital	Dial 911
Police/Sheriff/Highway Patrol	Dial 911
Fire Department	Dial 911

SITE RESOURCES:

Water Supply	20 lb. Fire Extinguisher
Telephone	First Aid Kit
Visqueen	Sorbant Pads

EMERGENCY CONTACT: Name: _____
Telephone: _____

EMERGENCY ROUTES: 1. Route to Nearest Fire Department:

_____
_____
_____

2. Route to Nearest Hospital:

_____
_____
_____

UNDERGROUND STORAGE TANK
INSTALLATION AND REPLACEMENT

9.1 Section

9.1.1 Call Underground Service Alert at 1-800-642-2444 to mark all utilities in the sidewalks surrounding service station. Check to see who is covered by service. Some municipalities do not subscribe. Requests must be made 72 hours in advance.

9.1.1.1 Call any known non-subscribers to USA to mark their lines, i.e., local sewer and storm drain agencies.

9.1.1.2 If available, use site drawings of underground lines to mark line locations before any excavating is done.

9.1.1.3 If needed, no parking signs should be posted at this time.

9.1.2 Superintendent will conduct a site safety briefing with project foreman prior to the start of work.

9.1.3 Use sufficient lighted barricades and flagging. (barricade for each ten feet of distance)

9.1.4 Shut off all power to station exterior (pumps, lights, etc.) when starting tank excavation.

9.1.5 Post "No Smoking" signs and enforce them.

9.1.6 Observe overhead line clearances. A minimum 10 feet clearance must be maintained.

9.1.7 Hard hats are to be worn at all times during tank removal and installation.

9.1.8 Fire extinguishers are required on site during tank removal operations. (1-20 lb. ABC minimum)

9.1.9 Use accepted procedures for freeing tanks of vapors:

- o Tank may not contain more than 1 gallon of product per 1000 gallon of capacity.
- o Remove all product from tank after all lines have been purged.
- o Add a minimum of 10 gallons of water to tank and allow to settle 5 minutes then pump out into approved drums.
- o Insert 20 lbs of dry ice per 1000 gallons of tank capacity using as many tank openings as possible.
- o Add 5 gallons of water to dry ice in tank.

- o Recheck tank for liquid product.
- o Begin vapor free/tank ventilation with compressed air venturi device. Device must be grounded to prevent buildup of static electricity.
- o Use Gastechtor to check vapor levels in tank hole or other excavations to insure vapors have not collected.
- o Tank LEL must be less than 10% or as instructed by local fire marshal before it may be moved.
- o Drums of extracted water/product are to remain on site for later disposal. Drums must be labeled as to contents.
- o Tanks must be removed from site as soon as possible and properly disposed of.

9.1.10 Use of electrically powered tools in tank excavation while old UGST are in ground is prohibited.

9.1.10.1 A manual four wheel cutter is recommended for cutting lines when necessary.

9.1.10.2 Pneumatic tools may be used providing LEL in tank area is confirmed below 20% Gastechtor reading.

9.1.11 All persons not required to be working at the excavation should remain outside work area.

9.1.11.1 Watch for fellow workers walking around excavation, hopto, loader, and other heavy equipment.

9.1.12 No personnel may enter a tank excavation deeper than five feet below grade for <u>any</u> reason unless the excavation is properly shored or terraced.

9.1.12.1 Personnel may enter the excavation to walk on the tank top during purging, LEL checks or to attach chains for removal, as per above.

9.1.12.2 Use extreme caution when walking on any tank top as they can be very slippery.

9.1.13 When working in the street, all personnel must wear red vests and hard hats. Stop/slow paddles must be used by traffic control personnel. Traffic control personnel must be used any time normal street traffic is affected, i.e., loading or unloading tanks.

9.1.14 If a vehicle or piece or equipment is protruding into the street, it must be coned and/or barricaded. Two way traffic must be maintained.

9.1.15 When tanks are being loaded or unloaded, no personnel are allowed to be under the tanks.

9.1.16 No personnel are allowed to work on a tank top while tank is above ground or on a trailer.

9.1.16.1 Ladders must be used or tank may be rolled such that necessary work, i.e., air testing may be performed from ground level.

9.1.17 A temporary vent must be installed in each newly installed tank.

9.1.18 Tanks will be ballasted with water to avoid tank floating. Gasoline may be used at the direction of the customer only.

9.1.19 All driveways and excavated areas must be barricaded and flagged at all times except to allow worker equipment access.

9.1.20 Insure all public right of ways (street and sidewalks) are clean and free of job caused hazards.

9.1.21 Fence excavation as required by the customer or local ordinance.

9.1.22 Nail 2" x 4" lumber between barricades around excavated areas and driveways where fencing is not used.

9.1.23 Cover trenches with plywood where needed for walking. Barricade all others, regardless of fencing.

9.1.24 Keep area lighted at night when possible.

9.1.25 A 24-hour guard will be maintained on site when required, e.g., an excavation over 5 feet deep containing water, excessive vapors are present or there is exposed piping which has been tested.

9.2 Street Work

9.2.1 All planned street work will be submitted to the safety officer a minimum of 72 hours prior to commencement of work.

9.2.2 The Safety Officer is responsible for formulating a traffic safety plan for the site

9.2.3 The Safety Officer or Superintendent will physically check each site for street layout.

9.2.3.1 All digging/drilling locations should be marked at this time.

9.2.3.2 USA will be notified ASAP after marking.

9.2.3.3 If needed, no parking signs should be posted a minimum of 72 hours prior to commencement of work.

9.2.4 The traffic safety plan will include as a minimum:

- o map of location with excavation points marked.
- o lanes to be affected.
- o traffic control devices needed.

9.2.5 A traffic safety plan will be made for each site requiring regular monitoring and/or sampling of street wells. This plan will become a part of the work order.

9.2.6 Two persons are required for all street work requiring a traffic lane closure. Two men recommended for all other street work.

9.2.7 A red safety vest with reflective stripes will be worn by all personnel working in the street or by those crossing a street on regular basis to work. Hard hats are recommended while working in the street to provide additional protection and visibility to motorists.

9.2.8 The State of California Department of Transportation (CALTRANS) guidelines will be used as the traffic control guide unless specifically supplemented by local requirements.

9.2.9 No work in the street will commence until the affected lanes have been closed off and all traffic control devices are in place.

9.2.10 Vehicles should be parked so as to provide maximum protection for personnel. At least one vehicle must be equipped with a warning light other than hazard flashers.

9.2.11 All excavations in the street including parking areas will be covered by trench plates when practical.

9.2.12 Any cones or delineators left overnight in or near the street must have reflective sleeves.

9.2.12.1 Unattended 28" cones are not to be used to block a lane of traffic at night.

9.2.13 Barricades left overnight must be lighted. Use of unattended barricades in the street is not recommended.

UNDERGROUND STORAGE TANK

INSTALLATION SPECIFICATIONS

Prepared by

Barghausen Consulting Engineers, Inc.

for

ATLANTIC RICHFIELD COMPANY

FAC. NO. 2035 ADDRESS: Albany

1. SCOPE

a. Owner will furnish tanks, pumps, dispensers, and any other related items as marked on the drawings "furnished by Owner." The Contractor shall furnish all pipe and fittings and any other items not indicated on the drawings as being furnished by Owner but necessary for a complete and fully operational gasoline dispensing system. Tanks shall be either steel or fiberglass of a make shown on the drawings.

b. Permits for the Gasoline Tanks and Dispensing Units will be obtained by Owner unless otherwise provided for. Contractor shall obtain and pay for all other permits, licenses, etc., including testing and sealing of dispensers as required by weights and measures authorities.

c. All underground or other concealed work shall be inspected and approved by Owner's Representative before being covered over. Contractor shall be liable for any and all undue settlement and shall repair at his expense any damage resulting therefrom for a period of one (1) year after acceptance of the work. (Undue settlement shall be settlement in excess of one (1") inch.)

2. FIBERGLASS TANK INSTALLATION

Fiberglass tanks are to be installed in accordance with the manufacturer's instructions, the drawings, and this specification. Contractor is completely responsible for the installation and he is to be aware of those job conditions which could have an adverse effect and/or require that he advise Owner's engineer for instructions before proceeding. The Contractor is cautioned that this specification and the drawings are for guidance and details, and that the manufacturer's recommendations which accompany each tank take precedence, and must be followed if they differ. Contractor is to accept tanks on the job site and inspect them for damage.

Visible damage is to be noted on the delivery receipt and Owner's engineer notified immediately.

a. Handling -- The tank is not to be rolled or dropped. It is to be handled using lifting lugs and guys, and positioned gently. If left above grade, it is to be chocked with old tires and tied down with ropes to prevent rolling in a wind.

b. Testing -- (Xerxes Century-Cast) Before tanks are placed in position, they shall be put under a 5 lb. air pressure test, in the presence of Owner's Representative. Remove all metal hole covers and replace with pipe plugs before applying pressure to the primary (internal) tank, leaving the secondary (outside) tank open to the atmosphere. Use two gauges designed to indicate up to 10 psi, no more. (Gauges of greater range are notoriously inaccurate at the low end.) Be guided by the gauge with the lowest reading. Leave the 5 psi on the primary tank for thirty minutes or more until all observers agree no significant leak is indicated (this test will not reveal a pinhole leak). Leave the pressure on the primary tank and pressurize the secondary tank to 5 psi (NEVER PRESSURIZE THE SECONDARY TANK WITHOUT PRESSURE IN THE PRIMARY TANK TO DO SO VOIDS THE WARRANTY AND WILL DAMAGE THE TANK). Thoroughly soap the outside of the tank while under pressure and watch for soap bubbles. Use a good heavy soapy mix to approval of Owner's engineer. When the test is completed, let pressure out of the secondary tank first. If a leak is found, the manufacturer is to be contacted at once, the tank is not to be installed until satisfactorily repaired or replaced.

Testing -- (Owens Corning Fiberglass) Tank is shipped with a continuous vacuum on the tank cavity, which is to be left on until the tank is air tested. Release the vacuum plug and tighten all fittings. For all tests install three gauges, one at the air supply fitting and another at a monitor fitting and another at a manifold between the inner and outer tank, using gauges with 1/4 to 1/2 lb. increments. Connect a manifold with a valve and gauge between the inner tank cavity and the space between the inner and outer tank.

Step 1: With the manifold valve closed, pressurize the inner tank to 5 psi maximum. **Step 2:** Close the air supply valve and disconnect the air supply. **Step 3:** Pressurize the cavity between the inner and outer tank to 5 psi by opening the valve in the manifold. Do not connect the air supply directly to the monitor fitting or allow the manifold valve to be open during Step 1. **Step 4:** Monitor the pressure on both inner and outer tank for at least 30 minutes with the manifold valve closed. Soap the outer tank and check for bubbles. If a leak is found in the outer tank call the manufacturer for repair. **Step 5:** With the manifold valve still closed, release the pressure and vent the inner tank while maintaining pressure on the outer. **Step 6:** Monitor the pressure on the outer tank for 30 to 60 minutes. If a leak is indicated call the manufacturer. Do not exceed 5 psi during the tests.

c. Bedding Material and Backfill -- Naturally rounded stone, clean and free flowing, not less than 1/8" and no more than 3/4", (pea gravel) is the preferred material. As an alternate, washed crushed stone, free flowing and meeting ASTM C-33 Paragraph 9.1 for quality and soundness, with angular particle size of not less than 1/8" or more than 1/2" in diameter may be substituted. If either of these

materials is not available, contact the manufacturer for his recommendations. Do not allow backfill to be mixed with other material at the site. During cold weather, backfill must be dry and free of ice (ice would be a "false" backfill which would later collapse).

d. Excavation -- In good soil the hole must be large enough to provide 12" below bottom of tanks with the top of the tank 4'-0" below finish grade, 2' between tanks and 2' between the tank and the side of hole. When extremely poor soils, or soils which become free flowing when saturated (quicksand) are encountered, the dimension between the tank and the side of the hole must be increased to 4'. It will also be necessary to line the hole with a blanket of filter fabric such as Du Pont "Typar." When such a condition is suspected, call upon the manufacturer's representative and Owner's engineer before proceeding.

e. Placing and Backfill -- Place the tank(s) on at least 12" of approved bedding material. Do not place on screeds, tibers, cradles or the like. Level the tank in both directions, with the submerged pump end approximately 2" above the other end. Start placing the backfill and manually force the first two feet of material under the tank all around both sides and ends to provide uniform support, using a short 2x4 or appropriate blunt tool. This is critical to the satisfactory performance of the tank. Complete backfill to the top of the tank, placing the material uniformly around it as it (the material) rises in the excavation. Place barricades and earth around the excavation to prevent accidents and to prevent surface run-off from entering the excavation.

f. Place a 4" diameter slotted PVC pipe as a monitoring will vertically in the hole to extend 4' below the bottom of the tank and up to final grade. Place another on the opposite corner of the tank group, when there is more than one tank being installed.

g. Piping and Testing -- Make piping connections to tank (complete if possible, plug other openings if piping cannot be completed) in accordance with the drawings. Test the tank, vapor recovery, and vent lines under 5 PSI, soaping all joints, including those around fittings in the tank. (Test with nitrogen not air if the tank contains any product.)

h. Backfill & Slab at Grade -- Continue backfill over tank with the same material to subgrade. Install a 6" reinforced concrete slab at grade, per drawings.

i. Paving & Cleanup -- Precautions to keep surface water from entering the fresh backfill should be maintained until just before paving or final grading.

3. COATED STEEL TANK INSTALLATION

a. Excavation: Excavate to depth so tanks will have minimum 4'-0" cover, except where noted otherwise on drawings. Set tanks on 8" minimum thickness sand or gravel bed cushion. Tanks are preferred to be set dead level but it is permitted to slope tank bottom so there will be a slope of not more than 2" downward toward fill pipe end. Lower tanks carefully with openings vertical and centered.

Tank openings shall remain closed until pipe connections are made. Unused tank openings are to be permanently plugged. Minimum spacing between tanks is 2'-0".

b. Backfilling and Grading: Backfill under, between, beside and over storage tanks with a selected sand or a well-graded, durable, granular material and compacted to a maximum density. The granular material shall be a natural gravel or crushed stone not exceeding 2" in diameter. The filler material shall be sand, stone dust or soil. Fill shall be free or shale, cinders, organic material, unweathered mica soil, excessive amounts of clay or any acid forming material. Pit-run or run-of-bank material may be used with the permission of the Owner's Representative.

Water shall be used only as necessary to produce the maximum density. It shall not be used as a lubricant for placing the fill. Puddling of the fill shall not be permitted.

Place fill and compact in 12" layers without damage to tank(s) or piping. Compaction shall be obtained by mechanical tampers. After backfill has reached the top of the tank, place barricades and earth around the excavation to prevent accidents and to prevent surface runoff from entering the excavation.

c. Place a 4" diameter slotted PVC pipe as a monitoring well vertically in the hole to extend 4' below the bottom of the tank and up to final grade. Place another on the opposite corner of the tank group, when there is more than one tank being installed.

d. Piping and Testing -- Make piping connections to tank (complete if possible, or plug other openings if piping cannot be completed) in accordance with the drawings. Test the tank, vapor recovery, and vent lines under 5 PSI, soaping all joints, including those around fittings in the tank. (Test with nitrogen not air if the tank contains any product.)

e. Backfill & Slab at Grade -- Continue backfill over tank with the same material to subgrade. Install a 6" reinforced concrete slab at grade, per drawings.

f. Paving & Cleanup -- Precautions to keep surface water from entering the fresh backfill should be maintained until just before paving or final grading.

4. WET HOLE INSTALLATION

When water is encountered, the tanks must be anchored, special hold-down straps are required for fiberglass tanks. They must be ordered by telephone from the tank manufacturer immediately. Cables may be used with steel tanks. Notify Owner's engineer before proceeding.

a. When the hole can be dewatered, keep pumping while placing the 12" bed of setting stone which should then be dry enough to walk on.

b. Place concrete deadman anchors in accordance with the drawings, preferably cast in place.

c. Place the tanks, fasten the anchor straps on the designated ribs and

tie them to the deadmen with cable as shown on the drawings. Meanwhile, continue pumping.

d. Start backfilling the tanks in the normal manner, install the monitoring well pipes (with a water situation they need extend only 12" below the bottom of the tanks) and the pumping suction can be transferred to one or both of these.

e. When the backfill is level with top of tank, ballast the tank by filling it with product. Water may be used as ballast only when product cannot be obtained. Under no circumstances should any liquid be put in tank prior to backfilling. Record the amount of product ballast and lock fill caps and other opening when possible.

f. The tank must remain at least three quarters full of ballast for the minimum of seven days while the deadmen cure and develop the strength necessary to resist an uplift.

g. Complete the testing and backfilling in the normal manner as specified.

h. Install caps and access manholes on the monitoring well pipes.

When the hole cannot be dewatered by pumping, and the decision is made to proceed by Owner's engineer, additional work and caution is required. When the hole can be partially dewatered by ordinary pumping methods, it may be possible to proceed without using a well point system. If a well point system is installed, the tank installation can proceed as described above. If complete dewatering is not possible, and the hole is partially full of water, the installation is to proceed as follows:

i. Complete the excavation to a depth at least 12" below the bottom of the tanks. Line the hole with filter fabric if soil is unstable, "quick" or peat. Place the bedding layer of stone backfill in the hole. Level as well as possible.

j. Install concrete deadmen (which now must be pre-cast out of the hole), and with cables attached if the water conditions are severe enough.

k. Install the fill pipe and a temporary 6' vent pipe.

l. Lift the tank into the hole. If it floats, keep it in an upright position with the lifting line and align it with attended guy lines.

m. Add product to the tank for ballast until the tank sinks to bottom. The ballast must be added slowly and carefully, and must not be allowed to fill the tank above the water line by over an inch or two. As soon as the tank has reached the bottom of the hole the addition of ballast is to stop immediately.

n. Level the tank by adding stone backfill as necessary and "working" it from the surface with poles or boards.

o. As soon as the tank is level and firmly grounded, install the hold down straps, and complete the backfill, "working" it under the tank. Install the monitoring well pipes along with the backfill.

p. When the backfill reaches the top of the tank, complete filling with ballast. Verify the amount of product delivered, record it and lock the fill caps. (Water is to be used only when product is unavailable.)

q. Extend the temporary vent to 12' above grade. Pipe the permanent vent, remove the temporary one and connect the permanent one to the tank, using a union at the swingjoint.

r. Complete the installation and testing in the prescribed manner.

5. GASOLINE PIPING, GENERAL

a. All piping for product vents and vapor returns shall be Red Thread IIa or Ameron Alcohol with Black iron pipe or flexible connectors used at terminal ends for swing joints. Black iron pipe shall be used for tank risers for fill, vapor, gauge, and inspection. Interior of all piping must be kept free from dirt, scale, metal or fiberglass particles, etc. Contractor will be responsible for damage to pumps or other equipment resulting from foreign materials left in lines. No open pipe ends shall be left unsealed during interruptions in the work.

b. Piping shall be run as shown on the Tank and Line Replacement Site Plan at a depth of not less than 18" below surface of driveway. A swing joint shall be installed between each submerged pump and its horizontal run of product piping.

c. All product, vapor recovery, and vent lines shall slope to drain back towards tanks without traps.

d. No gasoline vent riser shall be less than 10 feet measured horizontally from a heater flue or building fresh air inlet or 5 feet measured horizontally from any other building opening. Pipe swing joints shall be installed on vent piping at the tanks and at the risers.

e. Pipe swing joints shall consist of two 90-degree elbows with a 6" long horizontal nipple between elbows. No close nipples shall be used.

6. FIBERGLASS PIPING, SPECIFIC INSTALLATION

Piping is to be 100% methanol compatible piping; Red Thread IIa or Ameron Alcohol. Installation shall be in accordance with manufacturer's instruction. All connections and swing joints will be made with black iron fittings. Leak detectors will be installed on each submerged pump.

a. All pipe is to be set on firm sand or pea gravel to the gradient required. Vapor recovery lines and vent lines, particularly, must be installed with a positive stable gradient. When such a slope cannot be achieved in vapor recovery lines, "pots" are to be installed as shown on the drawings.

b. Backfill is to be compacted sand (or pea gravel).

c. Tools used to taper the pipe must match the fittings being used.

d. Black iron fittings used for swing joints or connections at the tank and dispensers are to be 150 psi MI and must be wrapped with a tape such as #50 Scotchwrap All-Weather 10 mils as manufactured by 3M Company or equal, applied half-lapped to provide 20 mils thickness. The wrapping is to extend one foot onto the adjoining fiberglass pipe.

e. Assembly joint cement shall be Permatex 51-D.

f. Where supports are used to maintain gradient, etc., they must be of permanent material; wood is not permitted. Supports must not rest on the shell of a fiberglass tank or on backfill that would transmit a load onto such a tank.

g. Use a pipe thread compound suitable for gasoline, methyl and ethyl alcohol for all threaded joints in pipe and in tank fittings. Tank fittings may require that compound be used on the female threads as well as the male.

7. TESTING OF GASOLINE PIPING

a. Before backfilling all product piping, and only product piping, for the submerged gasoline pump system is to be tested at 75 psi pressure while isolated from tank (by closing valve in head of submerged pump and before installing leak detector which could be damaged at this pressure) soaping all joints and fittings. Test completed system with dispenser and pump installed. (See Gasoline Piping Test After Paving Base Installation 8.0)

b. Test vent, vapor recovery fill, and syphon cross-over after connection to tank, and all connections and openings at tank with not over 5 psi pressure using two gauges calibrated no higher than 10 psi. When two tanks are tied together with an active syphon cross-over, both tanks shall be tested at the same time. Any leaks indicated by soap bubbles shall be eliminated by tightening or re-cementing, including those at tank openings.

c. Notice of Tests and Inspection: All tests shall be made in the presence of Owner's Representative or an inspector from the permitting Authority. Contractor must give Atlantic Richfield Company at least 24 hours notice of any test.

8. GASOLINE PIPING TEST AFTER PAVING BASE INSTALLATION

a. Gasoline Product Piping shall be tested again after grading and rolling of stone base for paving has been completed. The test shall be conducted for a minimum of 30 minutes, with the Owner's Representative present. If any leaking is detected, corrections shall immediately be made and the entire test conducted again.

Test gauges shall be of proven calibration. Gauges shall have a minimum 3" face and the range shall not exceed 100 pounds.

Test the completed system at 45 psig minimum -- 50 psig maximum 1½ times the normal operating pressure). Tighten the set screw on the check valve by-pass (in the head of the submerged pumping units) while testing, and apply air through the opening in the emergency "shear" valve or the riser at the line sensor if used. To achieve the necessary pressure, either an

air compressor or a cylinder of nitrogen may be used. Nitrogen must be used if there is product in the tanks or lines. The test is to be conducted before the lines are filled with gasoline whenever possible.

When it is necessary to operate the dispensing system and sell product before paving, this test will not be required. The testing of the leak detectors will be substituted.

Note: After proper pressure has been injected into the system, the pressure source (compressor or nitrogen) shall be physically disconnected during the test period. Pressure of more than 50 psi will damage the valve seat and disc in the submerged pump.

9. GASOLINE DISPENSERS

Dispensers will be furnished to job site by Owner for installation and connection by Contractor. Check with ARCO Field Engineer for dispenser mounting requirements. Either Bravo box (under dispenser containment) is required, or secure island with minimum of two Red Head* J38 Anchors, in which case area under dispensers in island to be filled with clean sand to bottom of shear valve.

*Red Head: As manufactured by ITT Phillips Drill Division, Michigan City, Indiana.

10. TESTING OF LEAK DETECTORS

After system has been purged of air by repeated operation, the Contractor is to test the operation of all leak detectors. The test is to be as recommended by the manufacturer. Each product and its detector is to be tested separately by creating a "false leak." The plug in the shear valve is replaced by a petcock. While the submerged pump is running, the "leak" should activate the detector and the flow reduce to a trickle. If this does not happen, the leak detector is to be replaced and the test repeated until it does. If an electronic monitoring system is installed, the leak detector is to be tested as part of the test of that system.

11. TESTING WITH ELECTRONIC MONITORING SYSTEMS

After the system is complete and has been purged of air by repeated operation the operation of the electronic monitoring system will be conducted in accordance with the particular manufacturer's directions. This test is to be conducted in the presence of the Owner's engineer or an inspector from the permitting authority.

12. INSTALLATION OF ADDITIONAL TANKS

When additional tanks are added to an existing group, wherever possible the new tank will be placed in such a fashion that the new fill riser is in close proximity to existing fill risers to facilitate unloading without the necessity of moving the transport vehicle.

If a new tank is to be installed adjacent to an existing fiberglass tank, special precautions must be taken:

a. The existing tank must be protected against collapse due to the removal of support at one side.

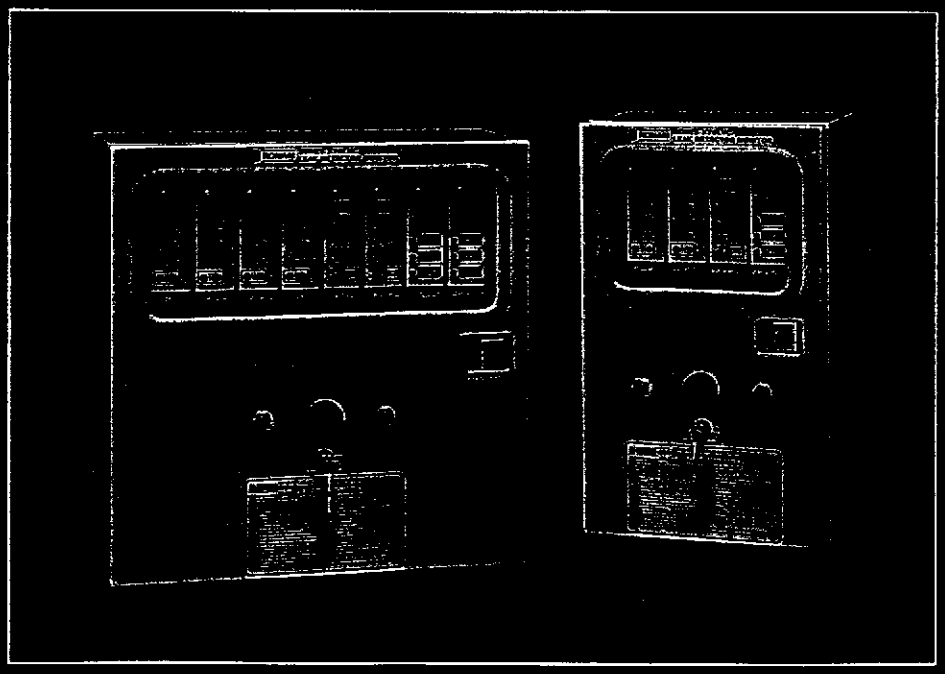
b. Sheet piling can be installed to prevent the existing backfill from falling into the new excavation. The product is to be removed from the tank.

c. When neither of the above is practical, the new tank may be installed in a separate excavation or if space does not permit that, the top third of the existing tank must be uncovered, the product removed and backfill replaced along with backfill for the new tank before product is reintroduced. When uncovering the adjacent tank take care not to endanger another tank!

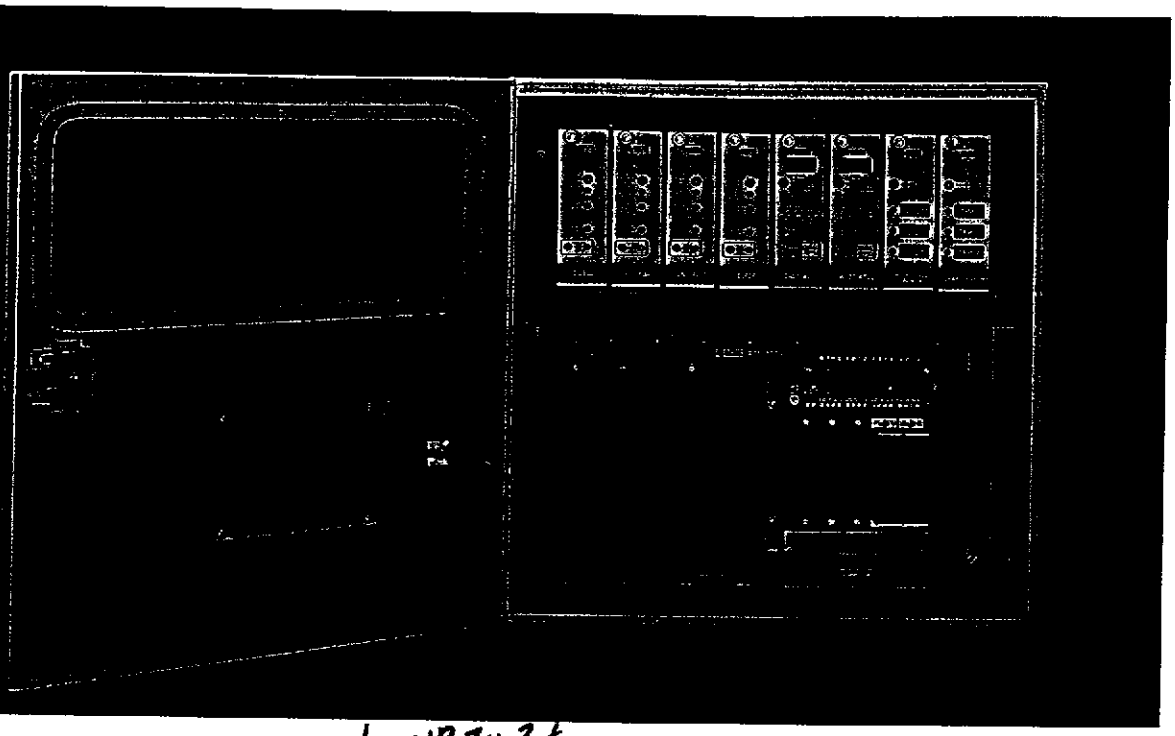
13. SECONDARY CONTAINMENT PIPING

When secondary containment on the product lines (and rarely the vapor return lines) is required, it shall be installed as shown on the drawings. The primary piping will be installed with a surrounding pipe of larger size, using 3" Red Thread IIa or Ameron Alcohol pipe. The installation is to be made so that each joint in the primary system can be tested with a soap solution before the secondary system is completed by installation of the "clamped together" or heat welded plastic fitting. Each secondary line shall terminate under the dispenser with a "boot" sealing the primary pipe immediately below the impact valve and at the sump at the tank a sealing fitting or boot shall be installed. Any product that would get into the secondary line should find its way to the sump and when indicated it may initially flow into inspection sumps at the islands.

SERIES X76LVC
LEAK DETECTION SYSTEM



RONAN



ERIES X76LVC LEAK DETECTION SYSTEM

Federal and State Laws require that all underground hazardous material storage facilities be monitored for leaks to prevent contamination of the soil and seepage into the water table. To comply with these laws different approaches may be taken to assure the detection of these leaks. Ronan's approach monitors the facilities continuously in all critical areas and complies with the EPA recognized methods of external leak detection. The equipment has found an exceptionally high level of acceptance by the cognizant agencies and major oil companies.

The Series X76 Systems have successfully been in operation for many years in gasoline stations, airport fueling facilities, transit systems, military and other government installations, emergency generating facilities for hospitals, high rise buildings, fire pumps, etc. The systems' main application which monitors hydrocarbons, such as gasoline and fuel oil, has been expanded to include chemicals and cleaning fluids.

System Description

The Series X76LVC is designed to monitor liquid level, vapor density, pressure and hydrostatic pressure. The system generates an alarm and may shut down specific facilities if preset parameters are exceeded. The microprocessor based system provides visual and audible alarms, self-diagnostics and sensor failure indication, fail-safe shutdown and auxiliary switch outputs for communications to a facility's remote displays.

The liquid level sensors will indicate presence of liquids in the annular space of double-wall tanks, secondary containment pipes, manhole or caisson compartments and in-tank high level to prevent overfill.

The vapor density, measured by the product's unique vapor transducer, is indicated on the appropriate plug-in module in parts per million (ppm) by means of a 4½ digit LED display. The display not only indicates the initial background vapor density in a vadose well or the annulus of any secondarily contained vessel, but also monitors an increasing trend of vapor density. The self-contained display also provides the ability to set the alarm and shutdown setpoints without additional calibration equipment.

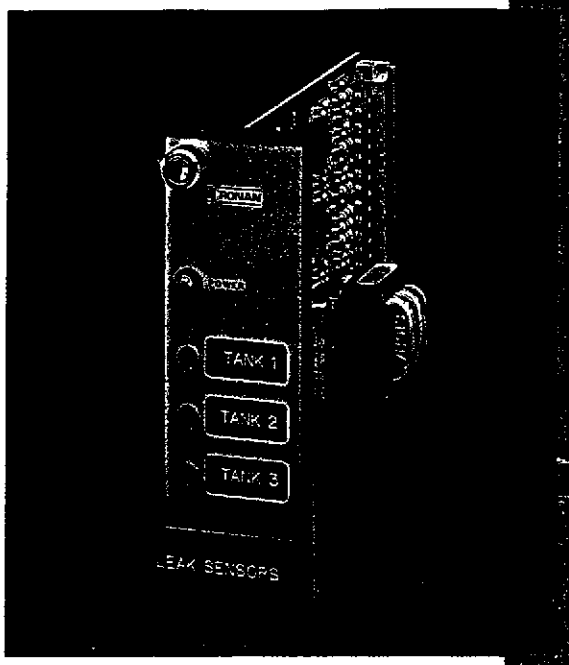
The pressure measurement utilized to monitor pressurized supply piping reads the pressure decay caused by a leak rate greater than 0.05 gph occurring between automatic test cycles (evey 30 minutes).

A hydrostatic measurement is applied to the annulus of a double-wall tank by detecting a loss of pressure in the pressurized cavity or the loss of liquid level in a reservoir or the annulus of the tank.

The X76LVC System, housed in an attractive wall mounted NEMA Type 1 Enclosure, contains the intrinsically safe barrier interface to the transducers, a number of three channel alarm modules, vapor modules, and/or dispenser modules. The front door mounted audible alarm and the flashing alarm lights are acknowledged by the ACK button and functionally tested by means of the TEST pushbutton.

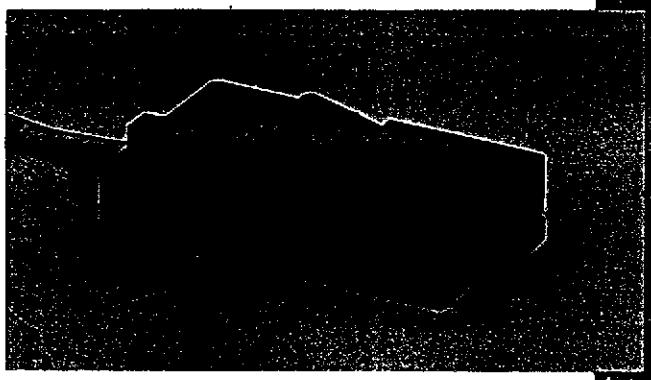
Alarm Contact Input Module/Model X76AM

The X76AM Alarm Module provides for up to three contact inputs typically from the horizontal liquid level sensor LS-7, the vertical level sensor LS-3, the hydrostatic leak sensors LS-10 and LS-20 and/or the pressure decay sensor JT-2. The sensor contacts transfer if liquid is present in the annular space of a double-wall tank, secondary containment pipes, manhole or caisson compartments. The alarm module monitors the status of the contacts and, should an abnormal condition occur, the front panel mounted LEDs will flash for visual alarm indication and the audible alarm turns on. The system ACK pushbutton allows the operator to silence the audible alarm and changes the flashing light to steady on. The green LED shows availability of power to the module and the contacts. The module's integral switches allow selection of normally open (sensor contact open with no liquid) or normally closed (sensor contact closed with no liquid) sensor input signals to the alarm module.



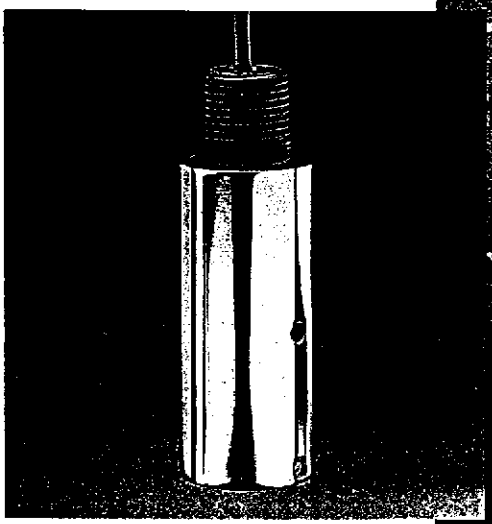
Liquid Level Sensor/Model LS-7

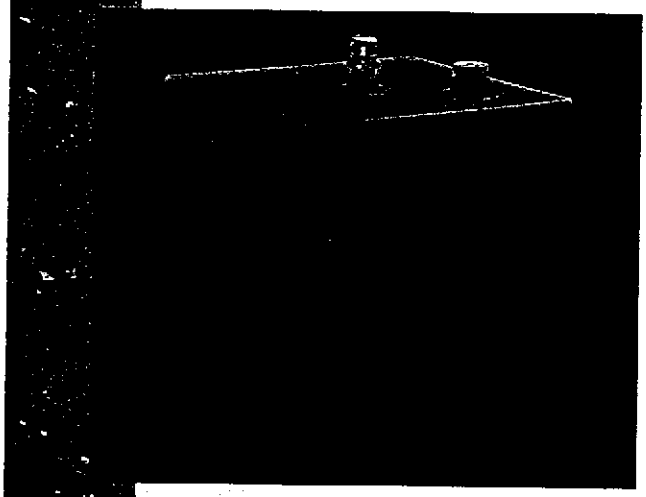
The Model LS-7 Liquid Level Sensor is designed for horizontal orientation applications where access is difficult, such as the bottom of dual-wall fiberglass tanks. The custom engineered unit provides highly reliable point level sensing. The plastic protected Reed switch guarantees long, trouble-free performance and compatibility with all hydrocarbon liquids.



Liquid Level Sensor/Model LS-3

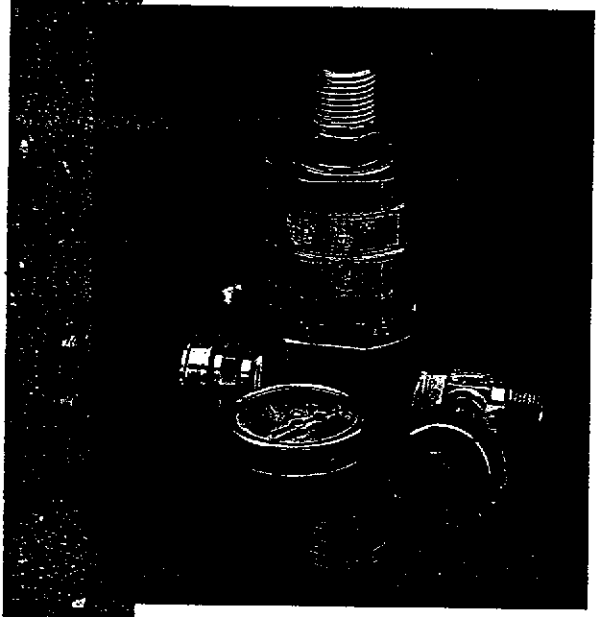
The Model LS-3 Liquid Level Sensor is most suitable for applications in steel and double-wall tanks. The sensor is positioned vertically, close to the bottom of the tank annulus or at maximum fuel level inside of the tank to prevent overflow. The all polysulfone level switch housed in a stainless steel outer jacket features a totally sealed single pole, single throw contact actuated by a float.





Model LS-10 (2 Gal., 7.57 L) and Model LS-20 (4 Gal., 15.14 L)

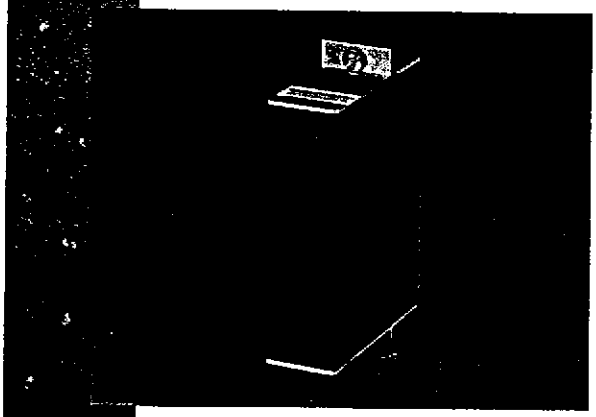
The Models LS-10 and LS-20 Leak Sensor Assemblies consist of a reservoir with integral level sensor. The reservoir, mounted on the annulus riser of a fiberglass tank, senses the loss of level in the water or brine solution in the filled secondary containment of a double-wall tank.



Pressure Sensor/Model JT-2

The Model JT-2 Loss of Pressure Sensor Assembly consists of a pressure switch, fill valve and the safety release valve. The unit is used to monitor the annulus pressure of a double-wall tank. The annulus is initially pressurized from an external air supply to 2.8 psi and sealed. A leak in the secondary containment will be sensed by the transfer of the pressure switch if the pressure falls below .5 psi.

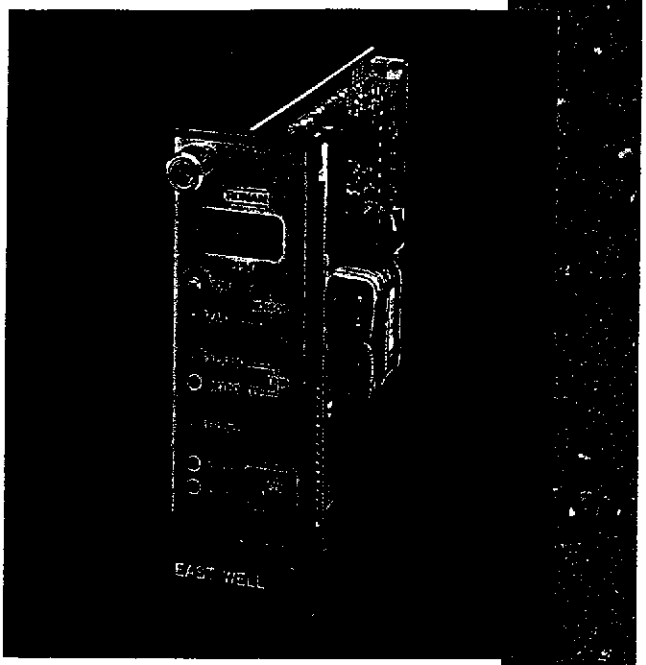
NOTE: Before applying this type of measurement, consult tank manufacturer.



Intrinsic Safety Barriers

Electrical equipment connected to switches located in a hazardous area, typically existing in gasoline or other hydrocarbon liquid storage facilities, requires the use of an explosion proof switch and sealed conduit installation or intrinsic safety barriers to limit the electrical energy required to sense the status of the switch in the hazardous area. The barriers not only provide a safe installation, but also provide considerable cost savings by allowing the use of buriable type cables and general purpose type sensors. The barriers, located in a separate compartment within the X76LVC system will provide safe interface to any of the level and pressure sensors classified for general purpose area applications.

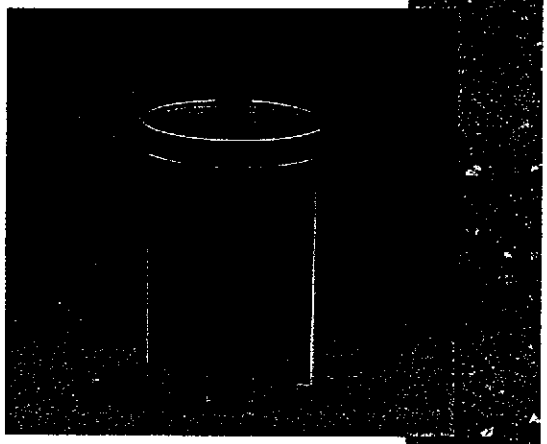
Vapor Input Module/Model X76HVD-4



The Model X76HVD-4 Module measures the vapor concentration in vadose wells, groundwater wells or secondary contained vessels. The microprocessor based input module measures the sensor resistance, which is directly proportional to the vapor concentration and displays the linearized values in parts per million (ppm) via the front panel mounted 4½ digit LED display. The X76HVD-4-2.5 Module is calibrated for a range of 0 to 2,500 ppm for products such as waste oil, diesel, JP-5, etc. The X76HVD-4-20 is used over the range of 0 to 20,000 ppm to measure gasoline, methanol, benzene, toluene, etc. Each module features an adjustable setpoint normally set for 25% of the lower explosive level (LEL) of the specific product monitored. The setpoint is adjusted to the desired ppm readout on the LED display by a front panel mounted potentiometer. Should the vapor concentration exceed the setpoint, a red flashing LED provides visual alarm, an audible alarm is actuated and a transistor switch output operates. The system's common acknowledge pushbutton silences the audible alarm. The LED remains flashing until the vapor concentration returns below the setpoint level.

The module features a front panel mounted amber LED indicator for sensor failure and a two-color LED, green for power on, turning red to show faulty wiring, e.g. short, open or incorrect polarity. Optionally, a contact or conductivity type level switch connected to the module provides indication (red LED) that the sensor is submerged.

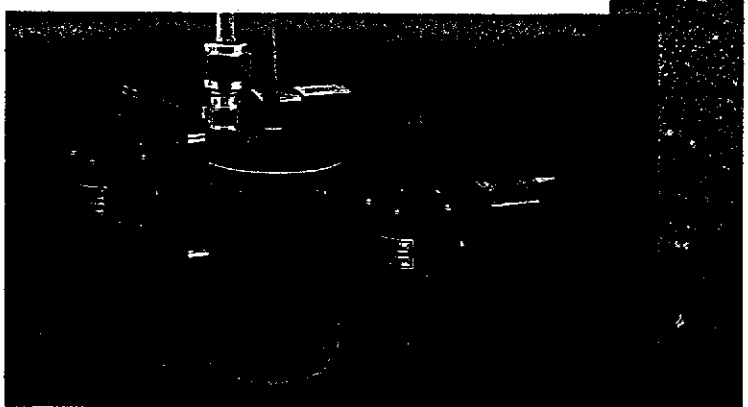
Vapor Sensor/Model HV



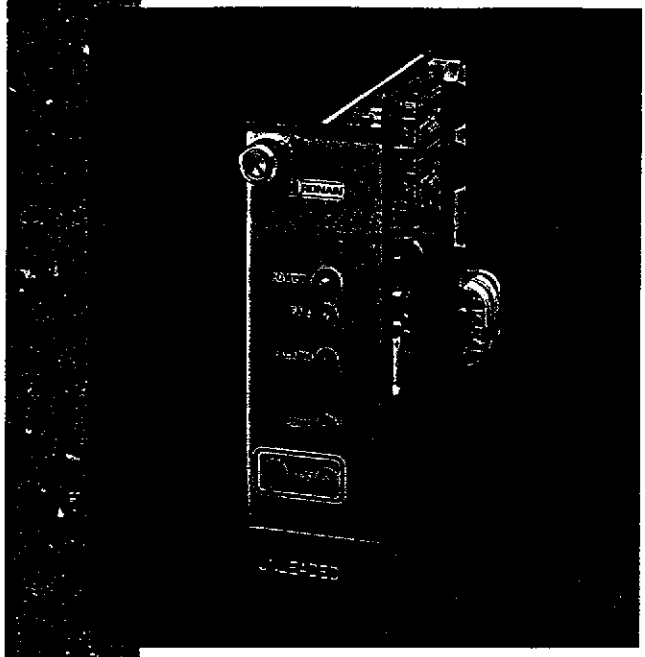
The HV Vapor Sensor, a solid state diffusion type, works on the absorption-desorption principle. The detection of a specific vapor is based on the absorption on the catalytic surface at a specific temperature. The gas absorption changes the resistance between the two electrodes embedded in the catalytic element. The resistance change is directly proportional to the vapor concentration and provides the input to the module.

The vapor sensor, consisting of the sensing element contained within an anodized aluminum enclosure, is protected by the porous metal-fiber disc which serves as a flame arrestor. The sensor head assembly is UL listed for hazardous locations: Class I, Division 1, Groups B, C and D.

Aspiration Vapor Sensor/Model HVFS



The Model HVFS Sensor consists of the basic HV sensor housed in a protective plastic enclosure equipped with an air tube connection. This allows aspiration of the sensing element via a vacuum pump with a recommended pumping volume of 1 to 2 SCFH. The aspiration will extend the zone of influence of the sensor for early gas detection in the well and provide considerably faster response time.



Line Leak Monitor/Model X76DM-4

The Model X76DM-4 Line Leak Monitor is designed to supervise pressurized product supply lines typically existing between underground tanks and above ground dispensers of products such as gasoline, diesel fuel, etc. The microprocessor based module provides timing sequences during which measurement of pressure decay and build-up are taken, LED status indication, test pushbuttons and remote fault indication relate system performance to the operator.

The Model X76DM-4A utilizes the JT-H1 measurement assembly in conjunction with a leak regulator manufactured by Red Jacket® or Tokheim®

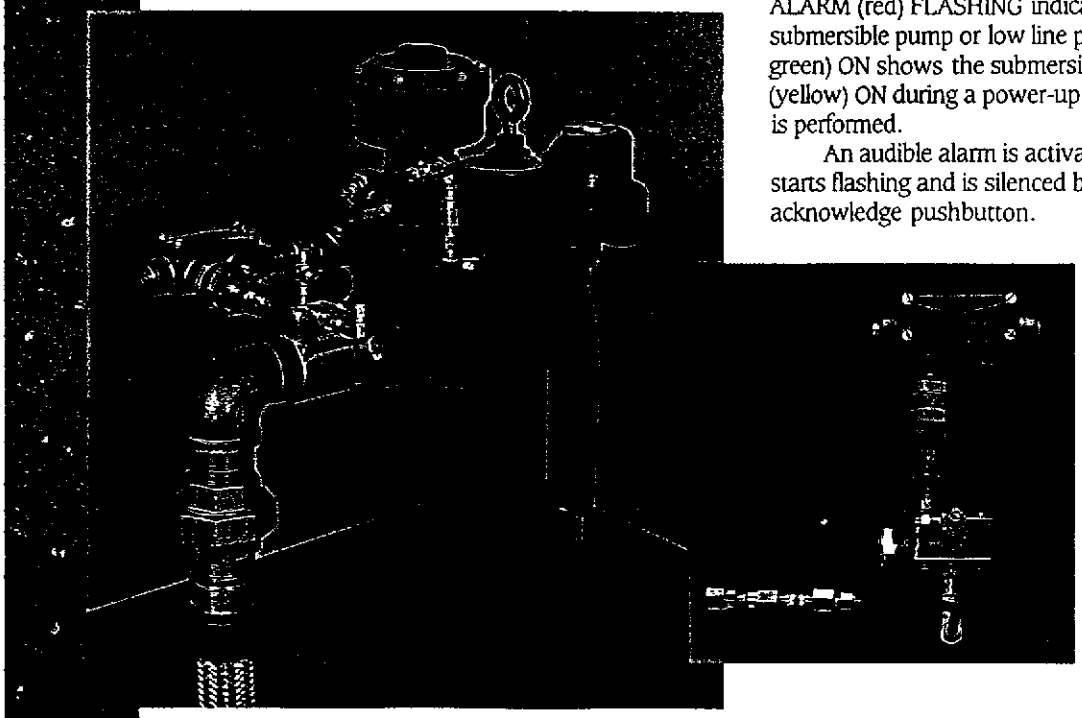
The Model X76DM-4A executes three basic automatic functions with manual initiation by the TEST pushbutton located on the front panel of the module. On a 30-minute interval, a test of the pressurized supply line is activated for a selectable time period to identify a leak of 0.05 gph or greater. This test is totally independent from the mechanical regulator and may be activated manually by the TEST button.

While the supply system is in the normal pumping mode, the line leak monitor module measures the supply line for low pressure due to a major leak occurrence. A pressure drop below the precalibrated value causes a complete product supply shutdown.

Between pumping demands the X76DM-4A monitors the supply line continuously for a leak rate of 0.5 gph or greater, identified by a pressure drop to less than 1 psi, arming the leak regulator to low flow condition. After 4 seconds, a complete product shutdown is executed and an audible/visual alarm is provided.

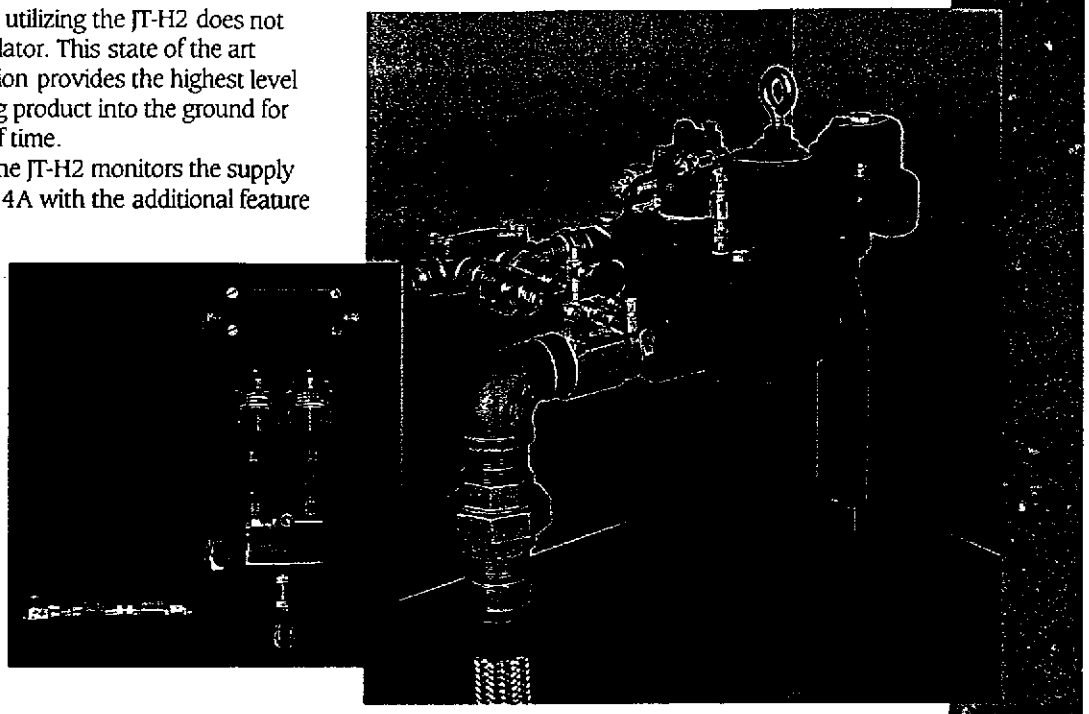
The five front panel mounted LED indicators provide status as follows: POWER (green) ON indicates power available, FAIL (amber) ON microprocessor failure, ALARM (red) FLASHING indicates shutdown of the submersible pump or low line pressure, PUMP (small green) ON shows the submersible pump running, TEST (yellow) ON during a power-up or whenever manual test is performed.

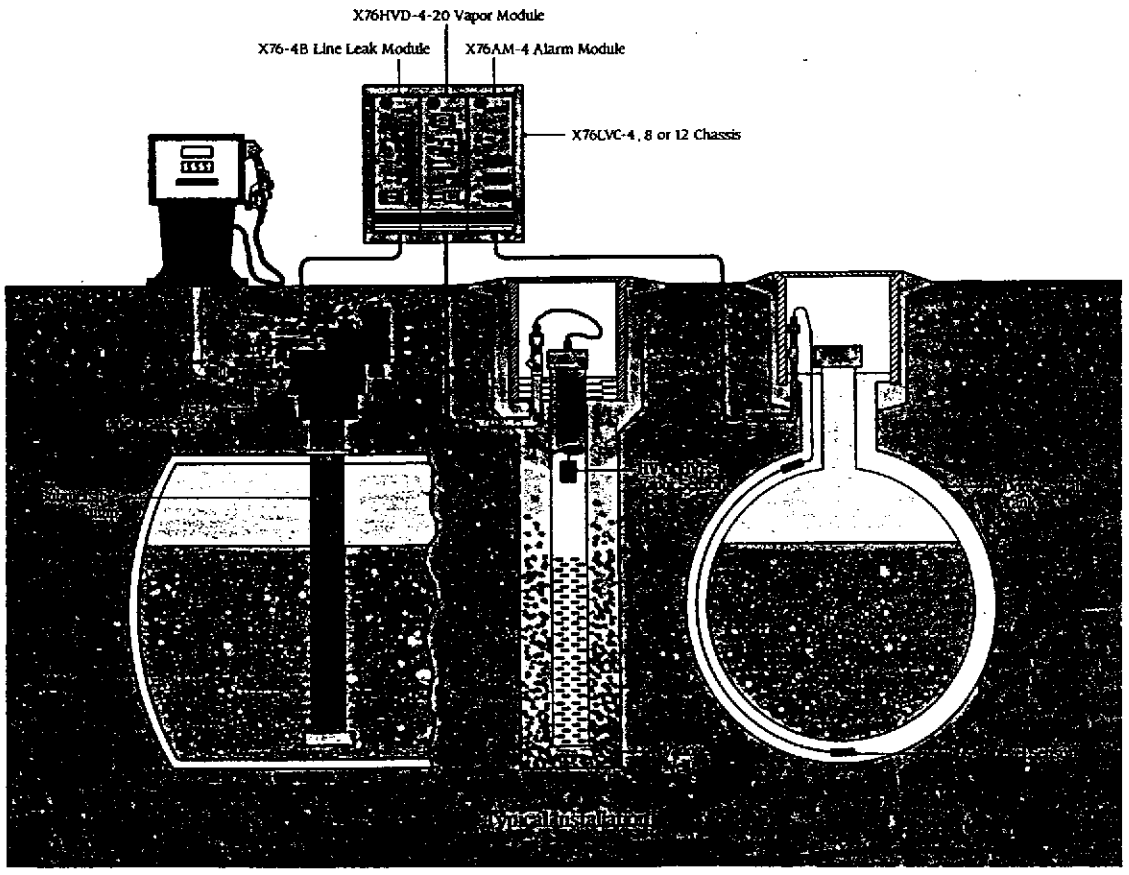
An audible alarm is activated when the alarm LED starts flashing and is silenced by the systems's acknowledge pushbutton.



The Model X76DM-4B utilizing the JT-H2 does not require the mechanical regulator. This state of the art approach to line leak detection provides the highest level of protection against leaking product into the ground for short or extended periods of time.

The X76DM-4B with the JT-H2 monitors the supply line similarly to the X76DM-4A with the additional feature that the product pump is inhibited in the low flow mode created by a leak rate of 0.5 gph or greater. Typically, applications with only mechanical regulators allow continuous pumping in the low flow mode with a leak rate of approximately 1.5 gph.





Typical Installation

Ordering Information

X76LVC-( )-( )-( )-( )

- Range
  - A=0-20,000 ppm plus X76HVD-4-20 Module
  - B=0-2,500 ppm plus X76HVD-4-2.5 Module
- Type of Vapor Sensor HV or HVFS
- Quantity of Vapor Sensors
- Probe Type
  - LS-3(*) Vertical Liquid Level Sensor
  - LS-7 Horizontal Liquid Level Sensor
  - LS-10 or LS-20 Hydrostatic Leak Detector
  - TT-2 Positive Pressure Leak Sensor
  - *NO=Normally Open, NC=Normally Closed
  - NOTE: 1. All probes use Alarm Module X76AM-4 (5 Alarm Module)
    2. Use additional listings for quantity and type of sensor, e.g. (2LS3), (LS10)
- Quantity of Probes
- Type of Leak Sensor and Module
  - A=TT-H1 plus X76DM-4A Modules
  - B=TT-H2 plus X76DM-4B(**) Modules
- Quantity of Line Leak Sensors
- Chassis Size: 4 or 8 Modules

Options

TT-1-PK	Piping Kit
TT-1-EK	Electrical Kit
TT-H-PK	Piping Kit
TT-H-EK	Electrical Kit

Spare Parts

LS-3(*)	Vertical Liquid Level Sensor
LS-7	Horizontal Liquid Level Sensor
LS-10	Hydrostatic Leak Detector
LS-20	Hydrostatic Leak Detector
TT-1	Line Leak Sensor (High)
TT-1L	Line Leak Sensor (Low)
TT-2	Tank Leak Sensor
TT-H1	Line Leak Sensor (Consisting of TT-1L with EK and PK)
TT-H2	Dual Leak Sensor (Consisting of TT-1 and TT-1L sensors with EK and PK)
HV	Vapor Sensor (Passive)
HVFS	Vapor Sensor (Aspirating Type)
X76-AM-4	Alarm Module (5 Alarm Inputs)
X76DM-4A	Dispenser Module (with TT-H1 Sensor)
X76DM-4B(**)	Dispenser Module (with TT-H2 Sensor)
X76HVD-4-20	Vapor Module (0-20,000 ppm)
X76HVD-4-2.5	Vapor Module (0-2,500 ppm)
X76SM-1	Intrinsically Safe Chassis (1 Module/3 Contact Inputs per Module)
X76SM-4	Intrinsically Safe Chassis (4 Modules/3 Contact Inputs per Module)
X76-22P	I.S. Barrier (3 Inputs)
X76BP-1	Blank Panel

*NO=Normally Open, NC=Normally Closed
**1=High Power Pumping System, 2=Low Power Pumping System

Warranty: Ronan warrants equipment of its own manufacture to be free from defects in material and workmanship under normal conditions of use and service, and will repair or replace any component found to be defective, on its return, transportation charges prepaid, within one year of its original purchase. This warranty carries no liability, either expressed or implied, beyond our obligation to replace the units which carries the warranty.

RONAN

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April 18, 1991
0418acha
AGS 69036.02

Mr. Larry Seto
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94621

Subject: Notice of Legal Obligation to ARCO Products Company, March 28, 1991, in reference to ARCO Station 2035, 1001 San Pablo Ave., Albany, California.

Dear Mr. Seto:

RESNA/Applied GeoSystems (AGS) has been contracted by ARCO Products Company (ARCO) to perform an additional environmental site assessment at the subject site. A Work Plan is being prepared for your review and approval which summarizes previous work at the subject site and AGS' approach and project tasks to perform subsurface investigation and remediation at the site. The work involved to perform proposed project tasks will be described in detail in addenda to the work plan and will be accompanied by a preliminary time schedule to perform specific tasks. We are submitting with this letter the deposit/refund check requested in your letter in the amount of $855.00 and we expect to submit the Work Plan by May 15, 1991.

If you have any questions or comments concerning this matter, please contact me at (408) 264-7723. Thank you.

Sincerely,
RESNA/Applied GeoSystems

Joel Coffman
Assistant Project Geologist

cc: Chuck Carmel, ARCO

91 APR 22 AM 10:45

April 18, 1991
0418lsto

Mr. Larry Seto
Alameda County
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94621

Subject: Notice of Legal Obligation addressed to ARCO Products Company, March 28, 1991, in reference to ARCO Station 2035, 1001 San Pablo Ave., Albany, California.

Dear Mr. Seto:

RESNA/Applied GeoSystems (AGS) has been contracted by ARCO Products Company (ARCO) to perform an additional environmental site assessment at the subject site. A Work Plan is being prepared for your review which will address the concerns of the letter to ARCO referenced above. We are submitting the deposit/refund check requested in the letter in the amount of $855.00 now and the Work Plan will follow shortly.

If you have any questions or comments concerning this matter, please contact me at (408) 264-7723. Thank you.

Sincerely,
RESNA/Applied GeoSystems

Joel Coffman
Assistant Project Geologist

Sorry this was left out!
Joel

Greg Barclay
General Manager

Larry

Applied GeoSystems

TRANSMITTAL

3315 Almaden Expressway, Suite 34
San Jose, California 95118
(408) 264-7723 FAX (408) 264-2435

TO: MR. RAFAT SHAHID
COUNTY OF ALAMEDA
DEPARTMENT OF ENVIRONMENTAL HEALTH
80 SWAN WAY, ROOM 200
OAKLAND, CALIFORNIA 94621

DATE: 4/12/91
PROJECT NUMBER: AGS 19011-1
SUBJECT: FIRST QUARTER 1991
ARCO SUMMARY REPORTS

FROM: MR. GREG BARCLAY
TITLE: GENERAL MANAGER

WE ARE SENDING YOU [XX] Attached [ ] Under separate cover via _____ the following items:

[ ] Shop drawings [ ] Prints [XX] Reports [ ] Specifications

[ ] Letters [ ] Change Orders [ ] _____

COPIES	DATED	NO.	DESCRIPTION
1	4/12/91	19011-1	FIRST QUARTER 1991 SUMMARY REPORTS FOR VARIOUS ARCO SERVICE STATIONS IN ALAMEDA COUNTY.

THESE ARE TRANSMITTED as checked below:

[ ] For review and comment [ ] Approved as submitted [ ] Resubmit ___ copies for approval

[XX] As requested [ ] Approved as noted [ ] Submit___ copies for distribution

[ ] For approval [ ] Return for corrections [ ] Return ___ corrected prints

[ ] For your files [ ] _____

91 APR 15 AM 7:40

REMARKS: THESE REPROTS ARE BEING FORWARDED TO YOU ON BEHALF OF MR. KYLE CHRISTIE OF ARCO PRODUCTS COMPANY.

SUMMARY REPORT FOR ARCO STATION #5369 IS ALSO INCLUDED.

Copies: 1 to AGS project file no. 19011-1

SAN JOSE READER'S FILE

*Revision Date: 10/15/90
*File Name: TRANSMT.PRJ

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
MEMORANDUM

DATE: December 12, 1990

TO : ALL STAFF

FROM: Mary Newman-Carter

SUBJ: Office Coffee Club

For those who want to be in the coffee club again, please let me know. We will be getting another coffee maker this week. The cost per month will be 4.00.

If you do not want to be in the coffee club but want to use the cream and/or sugar, the cost will be 2.00 per month.

If you do not join the club, YOU WILL NOT be able to use the coffee for your clients when they come in for meetings. They Must go to the deli, NO EXCEPTIONS.

Applied GeoSystems 3315 Almaden Expressway, Suite 34, San Jose, CA 95118 (408) 264-7723

• FREMONT • IRVINE • HOUSTON • BOSTON • SACRAMENTO • CULVER CITY • SAN JOSE

April 12, 1991
0412rsha

Mr. Rafat Shahid
County of Alameda
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94621

Subject: **First Quarter 1991 Summary Reports** for various ARCO Service Stations located in Alameda County, California.

Mr. Shahid:

Enclosed are the Quarterly Summary Reports for various ARCO Service Stations in Alameda County, California, as listed below. We are sending you these reports on behalf of Mr. Kyle Christie of ARCO Products Company.

1260 Park Street	Alameda	Service Station 2112
1001 San Pablo Avenue	Albany	Service Station 2035
3000 Shattuck Avenue	Berkeley	Service Station 414
22141 Center Street	Castro Valley	Service Station 2152
2770 Castro Valley Road	Castro Valley	Service Station 4977
40055 Blacow Road	Fremont	Service Station 2147
35900 Fremont Boulevard	Fremont	Service Station 2158
40077 Mission Boulevard	Fremont	Service Station 6201
43500 Grimmer Boulevard	Fremont	Service Station 6206
365 Jackson Street	Hayward	Service Station 1319
899 Rincon Avenue	Livermore	Service Station 771
10600 MacArthur Blvd.	Oakland	Service Station 276
6407 Telegraph Avenue	Oakland	Service Station 374
2110 Mountain/Merced	Oakland	Service Station 623
3310 Park Boulevard	Oakland	Service Station 2107
889 West Grand Avenue	Oakland	Service Station 2169
556 Hegenberger Road	Oakland	Service Station 4494
731 W. MacArthur Blvd.	Oakland	Service Station 4931
52nd Street	Oakland	Service Station 6148

T O X G U A R D S Y S T E M S

823 N. La Cadena Dr., Colton, CA 92324

(714) 370-3470

P.O. BOX 30113 92408

TEST & MONITORING SYSTEM FOR UNDERGROUND STORAGE TANKS CONTAINING HAZARDOUS SUBSTANCES

TABLE OF CONTENTS

TOXGUARD PRESIDENT (Administration) . . . . . BOB SECCOMBE . . . .

TOXGUARD VICE-PRESIDENT (Research & Developement).JACK KOBLER . . . .

TOXGUARD VICE-PRESIDENT (Geologist/Soil Engineer).CRAIG SMITH . . . .

TOXGUARD SALES ADMINISTRATOR : . . . . . CHRIS WORTH . . . .

Contributing Consultants:

William T. Frankenburger, PH.D.
(Soil Microbiologist & Biochemist)

Alexander M. Dollar, PH.D.
(Biochemist)

15135 Hesperian Blvd.	San Leandro	Service Station 2162
17601 Hesperian Blvd.	San Lorenzo	Service Station 608

The Regional Water Quality Control Board and ARCO Products Company have no records for the following service station:

1401 Grand Avenue	San Leandro	Service Station 530

We understand that ARCO does not own the service station located at 4191 First Street in Pleasanton, California. Please call me at (408) 264-7723 if you have questions regarding the summary reports.

Sincerely,
Applied GeoSystems

Greg Barclay
Branch Manager

Enclosures: First Quarter 1991 Summary Reports

cc: Mr. Kyle Christie, ARCO Products Company

March

SCHEDULED MEETINGS
D/R = DEPOSIT RETURN SHEETS

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
					1 PAY DAY - D/R DUE	2
3	4 SENIORS MEETING 9-12	5	6 DENNIS' UNIT 9-9:30	7 LOWELL'S UNIT 9-9:30	8 ◑ ICC. 9-9:30	9
10	11 SUPPORT STAFF 10:30 - 11	12 STAFF MEETING 9-12 - LUNCH - MEETING W/ STRUCK 2-5	13 LARRY'S UNIT 9-9:30	14 TOM'S UNIT 9-9:30	15 PAY DAY - D/R DUE	16 ○
17 St. Patrick's Day	18 CONNIE 9-9:30	19	20 DENNIS' UNIT 9-9:30	21 LOWELL'S UNIT 9-9:30	22 ICC. 9-9:30	23 ◐
24 Palm Sunday	25 SUPPORT STAFF 10:30 - 11	26	27 LARRY'S UNIT 9-9:30	28 TOM'S UNIT 9-9:30	29 Good Friday PAY DAY - D/R DUE	30 Passover ●
31 Easter						

BIRD ACTIVITY IN MARCH

It's time to check your nest boxes: clean them, add a coat of paint, evict unwanted tenants. Purple martin scouts are on their way north. Bluebirds are setting up territory. Keep feeders and baths full. Add a dripper to your birdbath—the noise will attract mi[redacted]ng birds.

PLACES TO VISIT IN MARCH

Nebraska—500,000 sandhill cranes migrating along the Platte River. WRITE: *Grand Island Chamber of Commerce, Grand Island, NE 68801. Ohio—return of migrating turkey vultures.* WRITE: *Hinckley Chamber of Commerce, P.O. Box 354, Hi[redacted]y, OH 44233.*

UST LEAK SITE UPDATE Date of Last Review/Update: January 15, 1991 Current Date: April 15, 1991

SITE IDENTIFICATION

Name: ARCO Service Station 2035 Case No.:

Address: 1001 San Pable Avenue
Street Number Street

Albany 94706
City ZIP Code

County: Alameda Substance: Gasoline

Local Agency: Alameda County Environmental Health Department

Regional Board: Regional Water Quality Control Board - San Francisco Bay Area

LEAD STAFF PERSON

ACEHD - Larry Seto

CASE TYPE

_____ Undetermined _____ Soil Only _____ Ground Water _____ Drinking Water

STATUS (Date indicates when case moved into status)

_____	No Action Taken	
_____	Leak Being Confirmed	Date _____
_____	Preliminary Site Assessment Workplan Submitted	Date _____
_____	Preliminary Site Assessment Underway	Date _____
_____	Pollution Characterization	Date _____
_____	Remediation Plan	Date _____
_____	Remedial Action Underway	Date _____
_____	Post Remedial Action Monitoring	Date _____
_____	Case Referred to Regional Board	Date _____
_____	Case Referred to Dept. of Health Services	Date _____
_____	Case Closed	Date _____

REMEDIAL ACTIONS

None taken

COMMENTS

In January 1990, a preliminary envionmental site assessment report was submitted to the regulatory agencies summarizing the results of soil sampling from 5 borings at the site, prior to ARCO's planned tank removal activities. ARCO plans to replace the UST's at the site in 1991 and perform an investigation of the extent of hydrocarbon impacted soil during and after tank replacement activities are complete.

ARCO will submit a Work Plan for a subsurface investigation at the site during the second quarter 1991.

Please refer to the attached page for a listing of previously submitted reports which document site history.

RESPONSIBLE PARTY IDENTIFICATION (Only if newly discovered or changed)

Name

Contact Phone ( )

Address
Street Number Street

City State ZIP Code

REPORT	DATE	CONSULTANT
Limited Environmental Site Assessment AGS 69036-1	1/24/90	Applied GeoSystems

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

Certified Mail #P 062 128 239

March 28, 1991

Mr. Kyle Christie
Arco Products Com.
P.O. Box 5811
San Mateo, CA 94402

NOTICE OF LEGAL OBLIGATION

RE: Arco Station #2035, 1001 San Pablo Ave., Albany, CA

Dear Mr. Christie:

I have reviewed your Limited Environmental Site Assessment Report dated January 24, 1990, that was prepared by Applied GeoSystems. This report identified soil contamination with concentrations of TPH (gas) up to 2,400 ppm and concentrations of benzene, toluene, ethylbenzene and total xylene isomers up to 33 ppm, 140 ppm, 40 ppm and 200 ppm respectively. A sheen was also detected on the surface of the groundwater observed within borings B-1 and B-4. In addition, an underground waste oil tank was identified in this report that is not registered with this office.

Shell

For your information, a monitoring well installed adjacent to your property, contained over four feet of floating product on November 27, 1990.

Section 25189.5, California Health and Safety Code, Chapter 6.5, prohibits the disposal of a hazardous waste at any point which is not authorized.

Please submit your plan of correction with a deposit/refund check for the amount of $855.00, made payable to the County of Alameda, within thirty (30) days of the receipt of this letter. Your plan should include, but not be limited to the following:

1. Method(s) that will be used to determine the lateral and vertical extent of contamination.

2. Method(s) that will be used to determine the hydraulic gradient.

3. Statement identifying whether you plan on removing the underground waste oil tank. The tank must be registered if you do not remove it.

4. Expected date when you plan to commence with your preliminary investigation, and it's expected date of completion.

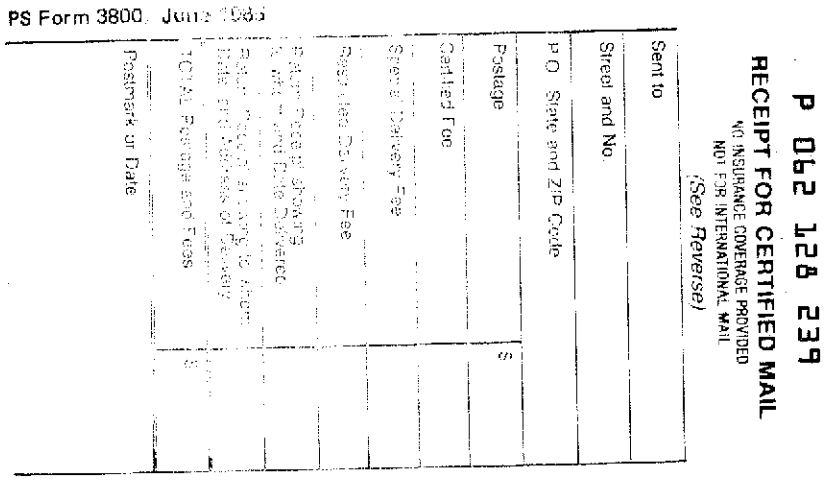
If you have any questions, please contact me at 271-4320.

Sincerely,

Larry Seto, Senior, Hazardous Materials Specialist

LS:mnc

cc: Gil Jensen, Alameda County District Attorney, Consumer and Environmental Protection Agency
Charlene Williams, DOHS
RWQCB
Rafat A. Shahid, Assistant Agency Director, Department of Environmental Health
Files



UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) CONTAMINATION SITE REPORT

EMERGENCY ☐ YES ☒ NO

HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED ? ☒ YES ☐ NO

FOR LOCAL AGENCY USE ONLY
I HEREBY CERTIFY THAT I AM A DESIGNATED GOVERNMENT EMPLOYEE AND THAT I HAVE REPORTED THIS INFORMATION TO LOCAL OFFICIALS PURSUANT TO SECTION 25180.7 OF THE HEALTH AND SAFETY CODE.
SIGNED _____ DATE 5/2/91

REPORT DATE (MM-DD-YY): 02/06/91

CASE #: 15305

REPORTED BY

NAME OF INDIVIDUAL FILING REPORT: Elaine Lavine

PHONE: (415)-571-2482

SIGNATURE: Elaine J. Lavine

REPRESENTING ☒ OWNER/OPERATOR ☐ REGIONAL BOARD ☐ LOCAL AGENCY ☐ OTHER

COMPANY OR AGENCY NAME: ARCO Products Company

ADDRESS (STREET): P.O. Box 5811 — CITY: San Mateo — STATE: CA — ZIP: 94402

RESPONSIBLE PARTY

NAME: ARCO Products Company ☐ UNKNOWN

CONTACT PERSON: Elaine J. Lavine

PHONE: (415)-571-2482

ADDRESS (STREET): PO BOX 5811 ATTN: Env.Compl.Dept. — CITY: San Mateo — STATE: CA — ZIP: 94402

SITE LOCATION

FACILITY NAME (IF APPLICABLE): ARCO FACILITY 02035

OPERATOR: RAHMAN FARSI/MAJID

PHONE: (415)-525-1362

ADDRESS (STREET): 1001 SAN PABLO AVENUE — CITY: ALBANY — COUNTY: ALAMEDA — ZIP: 94706

CROSS STREET: MARIN/SAN PABLO AVE

IMPLEMENTING AGENCIES

LOCAL AGENCY — AGENCY NAME: ALAMEDA COUNTY PUBLIC HEALTH

CONTACT PERSON: ED HOWELL SENIOR SP

PHONE: (415)-271-4320

REGIONAL BOARD: SAN FRANCISCO BAY REGION

CONTACT PERSON: STEVE LUQUIRE

PHONE: (415)-464-1255

SUBSTANCES INVOLVED

(1) NAME: GASOLINE — QUANTITY LOST (GALLONS): 3-4GALS ☐ UNKNOWN

(2) NAME: _____ — QUANTITY LOST (GALLONS): _____ ☐ UNKNOWN

DISCOVERY/TREATMENT

DATE DISCOVERED (MM-DD-YY): 02/01/1991

HOW DISCOVERED: ☐ INVENTORY CONTROL ☐ SUBSURFACE MONITORING ☐ NUISANCE CONDITIONS ☐ TANK TEST ☐ TANK REMOVAL ☒ OTHER DRIVE OFF

DATE DISCHARGE BEGAN (MM-DD-YY): 02/01/1991 ☐ UNKNOWN

HAS DISCHARGE BEEN STOPPED ? ☒ YES ☐ NO IF YES, DATE 02/01/1991

METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY)
☐ REMOVE CONTENTS ☐ REPLACE TANK ☐ CLOSE TANK ☐ REPAIR TANK ☐ REPAIR PIPING ☐ CHANGE PROCEDURE ☒ OTHER DRIVE OFF

SOURCE/CAUSE

SOURCE OF DISCHARGE: ☐ TANK LEAK ☐ UNKNOWN ☐ PIPING LEAK ☒ OTHER

CAUSE(S): ☐ OVERFILL ☐ RUPTURE/FAILURE ☐ SPILL ☐ CORROSION ☐ UNKNOWN ☒ OTHER DRIVE OFF

CASE TYPE

CHECK ONE ONLY
NA UNDETERMINED ☐ SOIL ONLY ☐ GROUNDWATER ☐ DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)

CURRENT STATUS

CHECK ONE ONLY
☐ NO ACTION TAKEN ☐ PRELIMINARY SITE ASSESSMENT WORKPLAN SUBMITTED ☐ POLLUTION CHARACTERIZATION
☐ LEAK BEING CONFIRMED ☐ PRELIMINARY SITE ASSESSMENT UNDERWAY ☐ POST CLEANUP MONITORING IN PROGRESS
☐ REMEDIATION PLAN ☒ CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY) ☐ CLEANUP UNDERWAY

REMEDIAL ACTION

CHECK APPROPRIATE ACTION(S)
☐ EVACUATE AND DISPOSE (ED) ☐ REMOVE FREE PRODUCT (FP) ☐ ENHANCED BIO DEGRADATION (IT)
☐ CAP SITE (CD) ☐ EVACUATE AND TREAT (ET) ☐ PUMP & TREAT GROUNDWATER (GT) ☐ REPLACE SUPPLY (RS)
☐ CONTAINMENT BARRIER (CB) ☒ NO ACTION REQUIRED (NA) ☐ TREATMENT AT HOOKUP (HU) ☐ VENT SUPPLY (VS)
☐ VACUUM EXTRACT (VE) ☐ OTHER (OT) _____

COMMENTS

CUSTOMER DROVE OFF WITH NOZZLE IN CAR. DEALER CLEANED UP SPILL WITH ABSORBENT MATERIAL. ALAMEDA COUNTY HEALTH AND OES NOTIFIED.

white -env.health
yellow -facility
pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

80 Swan Way, #200
Oakland, CA 94621
(415) 271-4320

Hazardous Materials Division Inspection Form

abandoned tanks: 25298 H&SC

Site ID# _____ Site Name Albany A.M. P.M. Today's Date 1/30/91

Site Address 1001 San Pablo Ave. EPA ID# _____

City Albany Zip 94706 Phone 525-1362

MAX Amt. Stored > 500lbs/55g/200cf? (Y) N
Hazardous Waste generated per month? _____

Inspection Categories:
___ I. Haz. Mat/Waste GENERATOR/TRANSPORTER
___ II. Business Plans, Acute Hazardous Materials
X III. Underground Tanks

The marked items represent violations of the Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)

I.A GENERATOR (Title 22)

	1. Waste ID	* 66471
	2. EPA ID	66472
	3. > 90 days	66508
	4. Label dates	66508
	5. Biennial	66493
Manifest	6. Records	66492
	7. Correct	66484
	8. Copy sent	66492
	9. Exception	66484
	10. Copies Rec'd	66492
Misc.	11. Treatment	66371
	12. On-site Disp. (H.S.&C.)	26189.5
	13. Ex Haz. Waste	66570
Prevention	14. Communications	67121
	15. Aisle Space	67124
	16. Local Authority	67126
	17. Maintenance	67120
	18. Training	67105
Contin. gency	19. Prepared	67140
	20. Name List	67141
	21. Copies	67141
	22. Emg. Coord. Trng.	67144
Containers, Tanks	23. Condition	67241
	24. Compatibility	67242
	25. Maintenance	67243
	26. Inspection	67244
	27. Buffer Zone	67246
	28. Tank Inspection	67259
	29. Containment	67245
	30. Safe Storage	67261
	31. Freeboard	67257

I.B TRANSPORTER (Title 22)

	32. Applic./Insurance	66428
	33. Comp. Cert./CHP Insp.	66448
	34. Containers	66465
Manifest	35. Vehicles	66465
	36. EPA ID #s	66531
	37. Correct	66541
	38. HW Delivery	66543
	39. Records	66544
Cont'rs	40. Name/ Covers	66545
	41. Recyclables	66800

Rev 6/88

Comments:

There are four underground tanks tested at this site. Monitoring alternative #5 is used. Daily inventory reconciliation is done using a dip stick, and the reading is entered into a computer to compare with the daily sales. A computer printout of this comparison is done on a daily basis. The U.G.T. are equipped with pipeline leak detectors, and the tanks are precision tested on an annual basis. Arco informs the baker of the precision test results, but does not show the report. * monitoring records appear OK

Contact: MAJID GHANADAN

Title: CO-OWNER Inspector: Jay Ho

Signature: M. Ghanadan Signature: Larry Seto

DAILY STICK READINGS

Date 01/27/91 Time 06:54

Tank #	Grade	Total Inches	Total Eighths	Water Inches	Water Eighths	Gas Gallons
1	Regular	57	4	0	0	3913
2	Unleaded	56	4	0	0	6454
3	Super Unl	66	0	0	0	1346
4	Super Unl	30	0	0	0	1476

4 Super Unl 30 0 0 0 1476

Have all stick readings been entered?

F1: Help F3: F5: F7: F9 : Main Menu F10: Gas Gallons

F2: Stick Rpt F4: F6: F8:

STICK READING DISPLAY

	Regular	Unleaded	Super Unleaded
Beginning Book	3827.1	7894.0	3163.4
Deliveries	1650.0	5550.0	1501.0
Sales	1196.4	6693.6	1957.7
Ending Book	3796.7	6554.5	2706.7
Ending Stick	3716.0	6454.0	2826.0
Over/Short	-37.3	-96.5	119.3
Allowable Variation	76.5	224.6	143.4
Daily Change	-44.6	-26.2	-71.3

Please press F2 to continue.

F1: F3: F5: F7: F9 : Main Menu

F2: Make Addn F4: F6: F8: F10: Stick Rdng

SUMMARY REPORT
Second Quarter 1990

ARCO Service Station 2035
1001 San Pablo Avenue
Albany, California
Alameda County

BACKGROUND

For site history prior to 1990 refer to the October-December 1989 Quarterly Summary Report issued in January 1990.

- January 25, 1990 - submitted Limited Environmental Site Assessment report to the Regional Water Quality Control Board, San Francisco Bay Region; the Alameda County Health Agency; and the City of Albany Fire Department, Fire Prevention Bureau. Five borings were drilled to a maximum depth of approximately 20 feet as part of a site assessment prior to tank replacement (Plate 1). Ground water was encountered at a depth of approximately 20 feet in each boring. (Applied GeoSystems Report 69036-1, dated January 24, 1990).

SOIL CONDITIONS

No change from last quarter. See Applied GeoSystems Limited Environmental Site Assessment Report 69036-1, dated January 24, 1990, for laboratory results of soil samples collected at the site.

QUARTERLY GROUND-WATER MONITORING

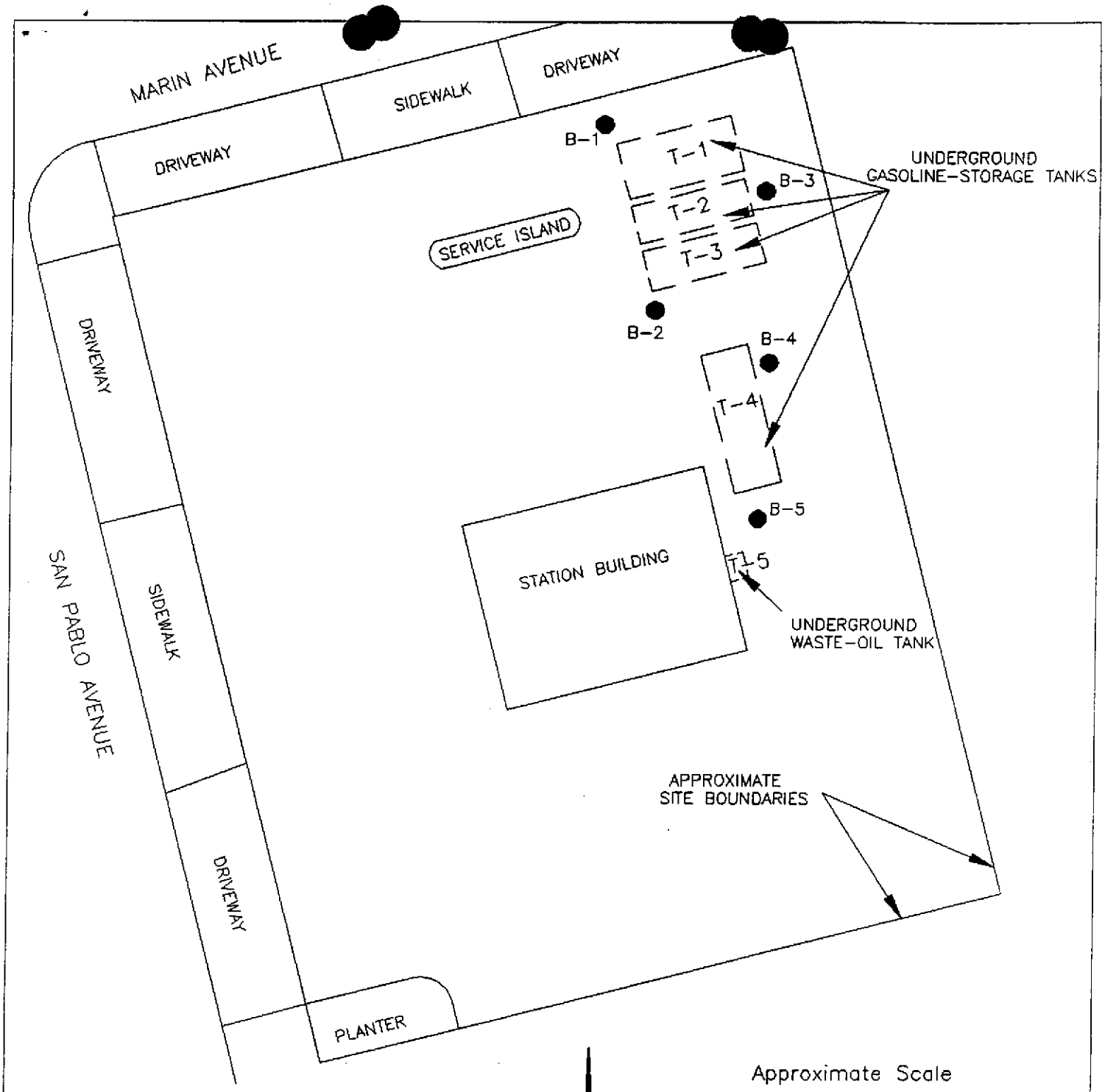
No monitoring wells onsite.

STATUS SUMMARY: REMEDIATION

No change from last quarter. Options for soil remediation will be considered in the future.

ANTICIPATED WORK FOR NEXT QUARTER

- ARCO plans to replace the underground storage tanks during 1990.
- An assessment to evaluate hydrocarbons in the soil at the site will be performed during tank replacement.



EXPLANATION

B-5 ● = Soil boring (Applied GeoSystems, August 9, 1989)

Source: Modified from plan supplied by ARCO.

Applied GeoSystems

PROJECT 19011-1

GENERALIZED SITE PLAN
ARCO Service Station 2035
Marin and San Pablo Avenues
Albany, California

PLATE
1

HAZARDOUS MATERIALS — ALAMEDA COUNTY

Site Brief for U N D E R G R O U N D T A N K S

for the City of Alameda — as of 12/28/90

UTID/ Status BillID		Name of Site	Site Address	#Tanks	PERMITS:
-0- T61043	C	Arco Station #02112	1260 Park St. Alameda , CA 94501	5	I:09/06/88 F:-0-
784 T61043	C	Arco Station #02035	1001 San Pablo Ave. Albany , CA 94706	4	I:09/06/88 F:-0-
658 T61043	C	Arco Station #04977 AM/PM	2770 Castro Valley Blvd. Castro Valley , CA 94546	3	I:09/06/88 F:07/05/88
-0- T61043	C	Arco Station #02152	22141 Center St. Castro Valley , CA 94546	3	I:09/06/88 F:-0-
1053 T61043	C	Arco Station #06041	7249 Village Pkwy. Dublin , CA 94568	4	I:09/06/88 F:-0-
813 T10115	C	Arco K&V Gas Foodmart	6211 San Pablo Ave. Emeryville , CA 94608	3	I:-0- F:-0-
T61043	C	Arco Station #05387	20200 Hesperian Blvd. Hayward , CA 94541	4	I:09/06/88 F:-0-
-0- T21120	C	Airport Arco	20450 Hesperian Blvd. Hayward , CA 94541	3	I:02/03/89 F:-0-
~~2112~~ T42311	C	Springtown Arco	909 Bluebell Dr. Livermore , CA 94550	3	I:-0- F:-0-
-0- T61043	C	Arco Station #00771	899 Rincon Ave. Livermore , CA 94550	5	I:09/06/88 F:-0-
198 T61026	R	Wong's Arco	2032 E. - 12th St. Oakland , CA 94606	0	I:-0- F:-0-
-0- T61043	C	Arco Station #02185	9800 E. - 14th St. Oakland , CA 94603	4	I:09/06/88 F:-0-
1130 TA1036	C	Freeway Arco	2740 - 98th Ave. Oakland , CA 94605	4	I:10/13/87 F:-0-
-0- T61043	C	Arco Station #02169	889 W. Grand Ave. Oakland , CA 94607	5	I:09/06/88 F:-0-
-0- -0-	R	Gin's Arco Service	706 Harrison St. Oakland , CA 94612	0	I:-0- F:-0-
-0- T61043	C	Arco Station #04494	566 Hegenberger Rd. Oakland , CA 94621	3	I:02/05/88 F:-0-
1038 T21043	C	High St. Arco	2951 High St. Oakland , CA 94619	5	I:02/05/88 F:-0-
-0- T61043	C	Arco Station #04931	731 W. MacArthur Blvd. Oakland , CA 94609	4	I:09/06/88 F:-0-
-0- T61043	C	Arco Station #00276	10600 MacArthur Blvd. Oakland , CA 94605	3	I:09/06/88 F:-0-
851 T41043	C	Mountain Blvd. Arco	2844 Mountain Blvd. Oakland , CA 94602	4	I:04/14/88 F:-0-
-0- T61043	C	Arco Station #02107	3310 Park Blvd. Oakland , CA 94610	3	I:09/06/88 F:-0-
-0- T61043	C	Arco Station #06002	6235 Seminary Ave. Oakland , CA 94605	4	I:09/06/88 F:-0-
-0- T61043	C	Arco Station #06148	5131 Shattuck Ave. Oakland , CA 94609	3	I:09/06/88 F:-0-
-0- T61043	C	Arco Station #00374	6407 Telegraph Ave. Oakland , CA 94609	3	I:09/06/88 F:-0-
-0- -0-	F	Freedom Arco	15101 Freedom Ave. San Leandro , CA 94578	3	I:-0- F:-0-
~~1794~~ ~~T81053~~	~~C~~	~~Tharco~~	~~2222 Grant Ave. San Lorenzo , CA 94580~~	~~1~~	~~I:08/16/88~~ F:-0-
779 T61043	C	Arco Station #00608	17601 Hesperian Blvd. San Lorenzo , CA 94580	4	I:09/06/88 F:-0-

Site Brief for A B - 2 1 8 5
for the city of Alameda

printed: 12/28/90
page: 1

ABID/BillID	Name of Site	Site Address	Zip	SysEntry	S
/L71107	Arco Station #02112	1260 Park St.	501	10/24/90	C
/L91227	Arco Station #02035	1001 San Pablo Ave.	706	08/14/89	C
658/HL7111	Arco Station #04977	2770 Castro Valley Blvd.	546	08/14/89	C
/HL7112	Arco Station #02152	22141 Center St.	546	08/14/89	C
1053/HL7114	Arco Station #06041	7249 Village Pkwy.	568	06/04/90	C
/LC1217	Arco Station #05387	20200 Hesperian Blvd.	541	06/04/90	C
/L22223	Airport Arco	20450 Hesperian Blvd.	541	08/01/89	C
/	Springtown Arco	909 Bluebell St.	550		P
/L41112	Arco Station #00771	899 Rincon Ave.	550	07/28/89	C
/L81123	Arco Station #02185	9800 E. - 14th St.	603	08/14/89	C
1130/L91386	Freeway Arco	2740 - 98th Ave.	608	09/18/89	C
/L81146	Arco Station #02169	889 W. Grand Ave.	607	08/14/89	C
/L81176	Arco Station #04494	566 Hegenberger Rd.	621	08/14/89	C
1038/	High St. Arco	2951 High St.	619	03/21/89	P
/L81178	Arco Station #04931	731 W. MacArthur Blvd.	609	06/04/90	C
/L81128	Arco Station #00276	10600 MacArthur Blvd.	605	11/20/89	C
851/L12017	Mountain Blvd. Arco Servi	2844 Mountain Blvd.	602	11/30/90	M
/L81188	Arco Station #02107	3310 Park Blvd.	610	08/14/89	C
/L81295	Sunshine Petroleum, Inc.	6211 San Pablo Ave.	608	12/28/90	M
/HL8112	Arco Station #06002	6235 Seminary Ave.	605	08/31/90	C
/L81130	Arco Station #06148	5131 Shattuck Ave.	609	06/04/90	C
/L81179	Arco Station #00374	6407 Telegraph Ave.	609	08/14/89	C
744/HL7116	Arco Station #02111	1156 Davis St.	577	08/14/89	C
/HL7118	Arco Station #00601	712 Lewelling Blvd.	579	08/14/89	C
~~1794/LA1469~~	~~Tharco~~	~~2222 Grant Ave.~~	~~580~~	~~07/28/89~~	~~C~~
779/HL7119	Arco Station #00608	17601 Hesperian Blvd.	580	08/14/89	C

Arco Stati

Report Total : 26

Status Codes: C=Current/Part2 M=Current/Part1 P=awaiting busPla
B=ready for Billing A=ready for Billing I=Inactive

6211 San Pablo
Do not map.

UST LEAK SITE UPDATE

Date of Last Review/Update: October 15, 1990

Current Date: January 15, 1991

SITE IDENTIFICATION

Name: ARCO Service Station 2035 Case No.:

Address: 1001 San Pable Avenue
Street Number Street

Albany 94706
City ZIP Code

County: Alameda Substance: Gasoline

Local Agency: Alameda County Environmental Health Department

Regional Board: Regional Water Quality Control Board - San Francisco Bay Area

LEAD STAFF PERSON

ACEHD - Larry Seto

CASE TYPE

X	Undetermined	____	Soil Only	____	Ground Water	____	Drinking Water

STATUS (Date indicates when case moved into status)

____	No Action Taken	
____	Leak Being Confirmed	Date ____
____	Preliminary Site Assessment Workplan Submitted	Date ____
____	Preliminary Site Assessment Underway	Date ____
____	Pollution Characterization	Date ____
____	Remediation Plan	Date ____
____	Remedial Action Underway	Date ____
____	Post Remedial Action Monitoring	Date ____
____	Case Referred to Regional Board	Date ____
____	Case Referred to Dept. of Health Services	Date ____
____	Case Closed	Date ____

REMEDIAL ACTIONS

None taken

COMMENTS

In January 1990, a preliminary envionmental site assessment report was submitted to the regulatory agencies summarizing the results of soil sampling from 5 borings at the site, prior to ARCO's planned tank removal activities. ARCO plans to replace the UST's at the site in 1991 and perform an investigation of the extent of hydrocarbon impacted soil during and after tank replacement activities are complete.

Please refer to the attached page for a listing of previously submitted reports which document site history.

RESPONSIBLE PARTY IDENTIFICATION (Only if newly discovered or changed)

Name

Contact Phone ( )

Address
Street Number Street

City State ZIP Code

REPORT	DATE	CONSULTANT
Limited Environmental Site Assessment AGS 69036-1	1/24/1990	Applied GeoSystems